MIDSIS - TROCS 4.0

Maritime Integrated Decision Support Information System
on Transport of Chemical Substances

Updated on: 03/07/2025

1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE

CAS Number: 76-13-1

> **Also known as:** ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	76-13-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1400 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	187.37
Density of gas (kg/m3)	8.34
Boiling Point (°C)	48
Melting Point (°C)	-35
Vapour Pressure (Pa)	36000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	680

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur d'ether

Transportation data

Cargo group	36
State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures halogénés

Reactivity data

Water	Non
Base(s)	Oui

Metal(s) and alloys	Oui (powder)
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

IDHL	2000
TLV-TWA	1000
TEEL-1 (mg/m3)	1250 ppm
TEEL-2 (mg/m3)	1500 ppm
TEEL-3 (mg/m3)	2000 ppm

Ecotoxicity

1,1,2-TRICHLOROETHANE

UN Number: 3082 - CAS Number: 70-00-5

> **Also known as:** ETHANE, 1,1,2-TRICHLORO

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	70-00-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1440 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	133.4
Density of gas (kg/m3)	5.93
Boiling Point (°C)	114
Melting Point (°C)	-36
Vapour Pressure (Pa)	2500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	410
Upper explosivity limit (UEL) (volume %)	15.5

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
State	liquide
Family name	hydrocarbures halogénés

Reactivity data

Water	Non
Metal(s) and alloys	Oui (Al)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	100
TLV-TWA	10

Ecotoxicity

1,1-DICHLOROETHANE

UN Number: 2362 - CAS Number: 75-34-3

Also known as: CHLORINATED HYDROCHLORIC ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2362
CAS number	75-34-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1174 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.97
Density of gas (kg/m3)	4.41
Boiling Point (°C)	57.3
Melting Point (°C)	-97.4
Vapour Pressure (Pa)	40534 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	458
Flash Point (°C)	-5.5
Lower explosivity limit (LEL) (volume %)	5.6
Upper explosivity limit (UEL) (volume %)	11.4

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de chloroforme
Standard behavior classification	SD/DE

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36

State	liquide
Temperature (°C)	froide
Family name	hydrocarbures halogénés
IMO class	3.2

Reactivity data

Water	Non
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	3000
TLV-TWA	100
TEEL-1 (mg/m3)	300 ppm
TEEL-2 (mg/m3)	3000 ppm
TEEL-3 (mg/m3)	3000 ppm

Ecotoxicity

1,1-DICHLOROPROPANE

UN Number: 1993 - CAS Number: 78-99-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1993
CAS number	78-99-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1132 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	112.99
Density of gas (kg/m3)	5.03
Boiling Point (°C)	88.1
Melting Point (°C)	-35
Vapour Pressure (Pa)	24890 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	557
Flash Point (°C)	15.56
Lower explosivity limit (LEL) (volume %)	3.4 (E)
Upper explosivity limit (UEL) (volume %)	14.5 (E)

Behaviour at sea

Additional data

Colour	incolore
Odour	douce

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures halogénés

IMO class	3.2

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	12.5 ppm
TEEL-2 (mg/m3)	75 ppm
TEEL-3 (mg/m3)	400 ppm

Ecotoxicity

1,2,3-TRICHLOROPROPANE

CAS Number: 96-18-4

> **Also known as:** ALLYL TRICHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	96-18-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1390 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	147.43
Density of gas (kg/m3)	6.45
Boiling Point (°C)	156
Melting Point (°C)	-15
Vapour Pressure (Pa)	200 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	304
Flash Point (°C)	73
Lower explosivity limit (LEL) (volume %)	3.2
Upper explosivity limit (UEL) (volume %)	12.6

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur d'acide

Transportation data

Cargo group	36
Temperature (°C)	out of sunlight
Family name	hydrocarbures halogénés

Reactivity data

Water	Non
Base(s)	Oui
Metal(s) and alloys	Oui (Al)
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	C - Carcinogenicity
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	100
TLV-TWA	10
TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	10 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

1,2,4-TRICHLOROBENZENE

UN Number: 2321 - CAS Number: 120-82-1

> **Also known as:** BENZENE, 1,2,4-TRICHLORO-

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2321
CAS number	120-82-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1450 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	181,5
Density of gas (kg/m3)	8.06
Boiling Point (°C)	213
Melting Point (°C)	16.5
Vapour Pressure (Pa)	130 (38°C) [Pa] at a temperature of 20°C
Ignition Temperature (°C)	571
Flash Point (°C)	99

Behaviour at sea

Additional data

Colour	blanc
Odour	odeur piquante de chlorobenzene

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
Temperature (°C)	ambiante
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	5 - ≥ 4000
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	M - Mutagenicity
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	5 ppm
TEEL-2 (mg/m3)	5ppm
TEEL-3 (mg/m3)	40 ppm

Ecotoxicity

1,2-DICHLOROPROPANE

UN Number: 1279 - CAS Number: 78-87-5

> **Also known as:** DICHLOROPROPANE, Propylene Dichloride, 1,2-Dichloropropane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1279
CAS number	78-87-5
Formula	$C_3H_6Cl_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1150 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	112.99
Density of gas (kg/m3)	5.04
Solubility (g/L)	2.8 [g/L] at a temperature of 20°C and salinity of 0‰ 2.7 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	96
Melting Point (°C)	-100
Critical temperature (°C)	578.5
Critical pressure (Pa)	4154325
Surface tension (mN/m)	33.93 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	5600 [Pa] at a temperature of 20°C 6666 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	555
Flash Point (°C)	15
Flash Point (Pensky-Martens closed cup) (°C)	13
Flash Point (Cleveland open cup) (°C)	21
Lower explosivity limit (LEL) (volume %)	3.4
Upper explosivity limit (UEL) (volume %)	14.5
Vapor enthalpy (J/Kg)	300235 [J/Kg] at a temperature of 96.4°C 321540 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	17000000

Specific heat capacity (J/(Kg·K))	1320
Henry's constant (mol/(m³·Pa))	274

Behaviour at sea

Log kow	2
Log koc	1.6
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	5771
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore	
Odour	douce odeur de chloroforme	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	SD	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	2000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H332	Harmful if inhaled.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
TLV-TWA	75	
TEEL-1 (mg/m3)	300 ppm	
TEEL-2 (mg/m3)	400 ppm	
TEEL-3 (mg/m3)	400 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	38
Lowest median lethal concentration (LC50) on crustacean (mg/l)	24.79
Lowest median lethal concentration (LC50) on fishes (mg/l)	240
Highest no observed effect concentration (NOEC) on algae (mg/l)	38
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	> 100
Highest no observed effect concentration (NOEC) on fishes (mg/l)	4.09
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	8 [µg/l] on the short term

1,3,5-TRIOXANE

CAS Number: 110-88-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	110-88-3

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	90.1
Boiling Point (°C)	115 (sublim.)
Melting Point (°C)	61
Vapour Pressure (Pa)	1700 (25�C [Pa] at a temperature of 20°C
Ignition Temperature (°C)	410
Flash Point (°C)	44
Lower explosivity limit (LEL) (volume %)	3.6
Upper explosivity limit (UEL) (volume %)	29

Behaviour at sea

Additional data

Colour	blanc
Odour	douce odeur d'ether
Standard behavior classification	SD

Transportation data

Cargo group	41
State	solide
Family name	éthers

Reactivity data

Water	Non
Acid(s)	Oui

Metal(s) and alloys	Oui (mild steel)
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	R - Reprotoxicity
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

1,3-CYCLOPENTADIENE dimère, fondu

CAS Number: 77-73-6

> **Also known as:** BICYCLOPENTADIENE, BISCYCLOPENTADIENE, 1,3-CYCLOPENTADIENE DIMER molten, DICYCLOPENTADIENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	77-73-6

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	980 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	132.22
Boiling Point (°C)	172
Melting Point (°C)	33
Vapour Pressure (Pa)	180000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	503
Flash Point (°C)	26
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	6.3

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	30
State	solide
Family name	oléfines

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

1,3-DICHLOROPROPANE

UN Number: 1993 - CAS Number: 142-28-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1993
CAS number	142-28-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1188 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	112.99
Density of gas (kg/m3)	5.03
Boiling Point (°C)	120.4
Melting Point (°C)	-99.5
Vapour Pressure (Pa)	8425 [Pa] at a temperature of 20°C
Flash Point (°C)	15
Lower explosivity limit (LEL) (volume %)	3.4 (E)
Upper explosivity limit (UEL) (volume %)	14.5 (E)

Behaviour at sea

Additional data

Colour	incolore
Odour	douce

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures halogénés
IMO class	3.2/3.3

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Interference with coastal amenities (E2)	SD - Sinker/Dissolver

Human toxicity threshold

TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	100 ppm
TEEL-3 (mg/m3)	350 ppm

Ecotoxicity

1,3-DIISOPROPYLBENZENE

UN Number: 3082 - CAS Number: 25321-09-9

> **Also known as:** BENZENE, DIISOPROPYL, BIS(1-METHYLETHYL)-BENZENE, CUMENE BOTTOMS, DIPB

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	25321-09-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	856 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	162.3
Density of gas (kg/m3)	7.22
Boiling Point (°C)	203
Melting Point (°C)	-63
Vapour Pressure (Pa)	133 (34�C) [Pa] at a temperature of 20°C
Ignition Temperature (°C)	449
Flash Point (°C)	76
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	6.5

Behaviour at sea

Additional data

Colour	ambré clair
Odour	inodore
Standard behavior classification	F/FD

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	32

State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures aromatiques

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

1,3-PENTADIENE

CAS Number: 504-60-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	504-60-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	680 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	68.12
Density of gas (kg/m3)	3.1
Boiling Point (°C)	42
Melting Point (°C)	-87.5
Vapour Pressure (Pa)	46000 [Pa] at a temperature of 20°C
Flash Point (°C)	-29
Upper explosivity limit (UEL) (volume %)	8.3

Behaviour at sea

Additional data

Colour	incolore
Odour	nauséabonde

Transportation data

Cargo group	30
State	liquide
Family name	oléfines

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

1,5,9-CYCLODODECATRIENE

UN Number: 2518 - CAS Number: 4904-61-4

> **Also known as:** CYCLODODECATRIENE, Cdt, Cyclododeca-1,5,9-Triene, 1,5,9-Cyclododecatriene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2518
CAS number	4904-61-4
Formula	$C_{12}H_{18}$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	890 [Kg/m³] at a temperature of 20°C 840 [Kg/m³] at a temperature of 100°C
Molar mass (g/mol)	162.28
Solubility (g/L)	5 [g/L] at a temperature of 20°C and salinity of 0‰ 0.34 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	231
Melting Point (°C)	-17
Vapour Pressure (Pa)	12265 (160�C) [Pa] at a temperature of 20°C
Flash Point (°C)	80
Flash Point (Pensky-Martens closed cup) (°C)	88
Lower explosivity limit (LEL) (volume %)	1
Upper explosivity limit (UEL) (volume %)	4
Henry's constant (mol/(m³·Pa))	2847.2

Behaviour at sea

Log kow	5.1
Log koc	3.73
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	2000

Additional data

Colour	blanc à jaune clair
Odour	irritante

MARPOL pollution category

Category	Description
X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Marine pollutant	P
Standard behavior classification	F/FE/E

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Family name	oléfines
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	5 - ≥ 4000
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Health**	
	H304	May be fatal if swallowed and enters airways.
	Environmental	
	H410	Very toxic to aquatic life with long lasting effects.

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.47
Lowest median lethal concentration (LC50) on fishes (mg/l)	2.0

1-METHYL-2-PYRROLIDONE

CAS Number: 872-50-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	872-50-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1030 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	99
Density of gas (kg/m3)	4.39
Boiling Point (°C)	202
Melting Point (°C)	-17
Vapour Pressure (Pa)	66000 (25C) [Pa] at a temperature of 20°C
Ignition Temperature (°C)	270
Flash Point (°C)	96
Lower explosivity limit (LEL) (volume %)	0.99
Upper explosivity limit (UEL) (volume %)	3.9

Behaviour at sea

Additional data

Colour	blanc
Odour	légère odeur de poisson
Standard behavior classification	D/DE

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	amines aromatiques

Reactivity data

Water	Non

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	25 ppm
TEEL-3 (mg/m3)	25 ppm

Ecotoxicity

1-METHYLNAPHTALENE fondu

UN Number: 3082

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1020 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	142.2
Density of gas (kg/m3)	6.33
Boiling Point (°C)	240/243
Melting Point (°C)	-3.6
Ignition Temperature (°C)	529
Flash Point (°C)	82

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	32
State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures aromatiques

Reactivity data

Water	Non
Acid(s)	Oui

Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

1-NITROPROPANE

UN Number: 2608 - CAS Number: 108-03-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2608
CAS number	108-03-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	89.09
Density of gas (kg/m3)	3.94
Boiling Point (°C)	120
Melting Point (°C)	-91
Vapour Pressure (Pa)	1700 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	404
Flash Point (°C)	28
Lower explosivity limit (LEL) (volume %)	2.5

Behaviour at sea

Additional data

Colour	incolore
Odour	légèrement fruitée
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	42
State	liquide
Temperature (°C)	ambiante
Family name	composés nitro

IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	1000
TLV-TWA	25

Ecotoxicity

1-PENTENE

UN Number: 1108 - CAS Number: 109-67-1

> **Also known as:** alpha-n-AMYLENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1108
CAS number	109-67-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	600 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	70.13
Density of gas (kg/m3)	3.1
Boiling Point (°C)	30
Melting Point (°C)	-165
Vapour Pressure (Pa)	66000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	273
Flash Point (°C)	-20
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	8.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence

Transportation data

Transport mode	Vrac,Colis
Cargo group	30
State	liquide
Temperature (°C)	ambiante

Family name	oléfines
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	750 ppm
TEEL-2 (mg/m3)	6000 ppm
TEEL-3 (mg/m3)	75000 ppm

Ecotoxicity

1-PHENYL-1-XYLYLETHANE

CAS Number: 40766-31-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	40766-31-2

Physical chemical data

Density (kg/m3)	983 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	210.3
Flash Point (°C)	143

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	FD/FED/E

Transportation data

Cargo group	32
Family name	hydrocarbures aromatiques

Reactivity data

Water	Non
Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight

Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

1.6-DICHLOROHEXANE

UN Number: 3082 - CAS Number: 2163-00-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	2163-00-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1070 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	155.07
Melting Point (°C)	-13
Vapour Pressure (Pa)	500 [Pa] at a temperature of 20°C
Flash Point (°C)	74

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	S/SD/D

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures halogénés

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

Ecotoxicity

2,2,4-Trimethyl-1,3-Pentanediol-1-Isobutyrate

CAS Number: 25265-77-4

> **Also known as:** Texanol, 2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate, Propanoic Acid, 2-Methyl-, 3-Hydroxy-2,2,4-Trimethylpentyl Ester, Propanoic Acid, 2-Methyl-, Monoester With 2,2,4-Trimethyl-1,3-Pentanediol, 2,2,4-Trimethyl-1,3-Pentanediol-1-Isobutyrate

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	25265-77-4
Formula	$C_{12}H_{24}O_3$

Physical chemical data

Physical State (25°C)	Liquid
Density (kg/m3)	957.7 [Kg/m³] at a temperature of 5°C
	954.2 [Kg/m³] at a temperature of 10°C
	947.7 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	45.625 [cSt] at a temperature of 5°C
	34.972 [cSt] at a temperature of 10°C
	19.996 [cSt] at a temperature of 20°C
Molar mass (g/mol)	216.32
Solubility (g/L)	858 [g/L] at a temperature of 25°C and salinity of 0‰
	970 [g/L] at a temperature of 20°C and salinity of 0‰
	870 [g/L] at a temperature of 20°C and salinity of 5‰
	660 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	244
Melting Point (°C)	-50
Surface tension (mN/m)	28.6 [mN/m] at a temperature of 22°C
	29.46 [mN/m] at a temperature of 6.2°C
	28.73 [mN/m] at a temperature of 12.4°C
	28.12 [mN/m] at a temperature of 19.5°C
Flash Point (Pensky-Martens closed cup) (°C)	122
Flash Point (Cleveland open cup) (°C)	120
Henry's constant (mol/(m³·Pa))	0.01

Behaviour at sea

Log kow	3.47
Log koc	1.47
Biodegradation in estuary environment (Half-life) (days)	16.5

Additional data

MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	18.4
Lowest median lethal concentration (LC50) on crustacean (mg/l)	> 95
Lowest median lethal concentration (LC50) on fishes (mg/l)	30

Highest no observed effect concentration (NOEC) on algae (mg/l)	3.28
Assessment factor (AF)	10000 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	2 [µg/l] on the short term

2,2-DIMETHYLPROPANE-1,3-DIOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1060 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	104.14
Boiling Point (°C)	208
Melting Point (°C)	123/127
Flash Point (°C)	107

Behaviour at sea

Additional data

Transportation data

State	solide

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating

Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	600 ppm
TEEL-2 (mg/m3)	600 ppm
TEEL-3 (mg/m3)	600 ppm

Ecotoxicity

2,6-DIETHYLANILINE

Also known as: ANILINE, 2,6-DIEHYL, BENZENEAMINO, 2,6-DIETHYL-(ACL)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	959 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	149.24
Density of gas (kg/m3)	6.64
Boiling Point (°C)	242
Vapour Pressure (Pa)	< 13 [Pa] at a temperature of 20°C
Flash Point (°C)	99

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	FD/F

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	amines aromatiques

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Cu)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	10
TEEL-2 (mg/m3)	60
TEEL-3 (mg/m3)	350

Ecotoxicity

2-(2-AMINOETHOXY)ETHANOL

UN Number: 3055 - CAS Number: 929-06-6

Also known as: DGA, DIGLYCOLAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3055
CAS number	929-06-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1060 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	105.14
Boiling Point (°C)	221
Melting Point (°C)	-12
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C
Flash Point (°C)	127

Behaviour at sea

Additional data

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Family name	alkanolamines

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	35
TEEL-2 (mg/m3)	250
TEEL-3 (mg/m3)	500

Ecotoxicity

2-AMINO-2-METHYL-1-PROPANOL < 90%

CAS Number: 124-68-5

> **Also known as:** 2-AMINODIMETHYLETHANOL, beta-AMINOISOBUTANOL, AMP 95

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	124-68-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	935 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	89.14
Density of gas (kg/m3)	> 1.29
Boiling Point (°C)	165
Melting Point (°C)	-2
Vapour Pressure (Pa)	10400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	446
Flash Point (°C)	87
Lower explosivity limit (LEL) (volume %)	1.1/1.5
Upper explosivity limit (UEL) (volume %)	9.2/10.1

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	D/DE

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	alkanolamines

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Oui (Al, Cu)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	0.075
TEEL-2 (mg/m3)	0.6
TEEL-3 (mg/m3)	500

Ecotoxicity

2-Butoxy Ethanol

CAS Number: 111-76-2

> **Also known as:** 2-Be, 2-Butoxy-1-Ethanol, Egbe, Ethylene Glycol Monobutyl Ether, Ethylene Glycol Mono-N-Butyl Ether, Ethylene Glycol N-Butyl Ether, Glycol Monobutyl Ether, Glycol Ether Eb, Monobutyl Glycol Ether, Butoxyethanol, O-Butyl Ethylene Glycol, Butylglycol, 3-Oxa-1-Heptanol, Monobutyl Ethylene Glycol Ether, Ether Monobutylique De L'Ethylene Glycol, 2-Butoxyethanol, 2-Butoxy Ethanol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	111-76-2
Formula	$C_6H_{14}O_2$

Physical chemical data

Physical State (25°C)	Liquid
Kinematic viscosity (cSt)	3.62 [cSt] at a temperature of 20°C 3.15 [cSt] at a temperature of 25°C
Molar mass (g/mol)	118.17
Solubility (g/L)	900000 [g/L] at a temperature of 20°C and salinity of 0‰ 900000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	168.4
Melting Point (°C)	-72.5
Critical molar volume (m³/mol)	0.000424
Critical temperature (°C)	634
Critical pressure (Pa)	3270000
Surface tension (mN/m)	26.55 [mN/m] at a temperature of 20°C 26.14 [mN/m] at a temperature of 25°C
Flash Point (Pensky-Martens closed cup) (°C)	60
Flash Point (Cleveland open cup) (°C)	69
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	10.1
Vapor enthalpy (J/Kg)	478886 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	30100000
Specific heat capacity (J/(Kg·K))	312.22
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.04

Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	0.16

Behaviour at sea

Log kow	0.84
Log koc	1.81
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	0.97

Additional data

MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

IDHL	700	
Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.

Precautionary statements	**Prevention**	
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	P270	Do no eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P321	Specific treatment (see ... on this label).
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P362	Take off contaminated clothing and wash before reuse.

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	911
Lowest median lethal concentration (LC50) on crustacean (mg/l)	540
Lowest median lethal concentration (LC50) on fishes (mg/l)	983
Highest no observed effect concentration (NOEC) on algae (mg/l)	286
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	100
Highest no observed effect concentration (NOEC) on fishes (mg/l)	> 100
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	5400 [µg/l] on the short term 1000 [µg/l] on the long term

2-ETHYL-3-PROPYLACROLEINE

UN Number: 1191 - CAS Number: 645-62-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1191
CAS number	645-62-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	857 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	126.2
Boiling Point (°C)	175
Vapour Pressure (Pa)	< 345 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	200
Flash Point (°C)	68

Behaviour at sea

Additional data

Colour	jaune
Odour	inodore
Standard behavior classification	F/FE

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	19
Temperature (°C)	ambiante
Family name	aldéhydes

Reactivity data

Water	Non
Acid(s)	Oui

Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

2-ETHYLHEXYLAMINE

UN Number: 2276

> **Also known as:** ALKYLAMINES, 1-AMINO-2-ETHYLHEXANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2276

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	129.25
Density of gas (kg/m3)	5.805
Boiling Point (°C)	169
Melting Point (°C)	< -76
Vapour Pressure (Pa)	27 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	265
Flash Point (°C)	50

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de musc et d'ammoniaque
Standard behavior classification	FD

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	amines aliphatiques
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Al, Cu, Zn)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

2-METHYL-6-ETHYLANILINE

CAS Number: 24549-06-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	24549-06-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	969 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	135.2
Boiling Point (°C)	231
Melting Point (°C)	-33
Flash Point (°C)	102

Behaviour at sea

Additional data

Colour	incolore
Odour	irritante
Standard behavior classification	FD/FED/E

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	amines aromatiques

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

2-METHYLPYRIDINE

UN Number: 2313 - CAS Number: 109-06-8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2313
CAS number	109-06-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	944 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	93.13
Density of gas (kg/m3)	4.13
Boiling Point (°C)	128.8
Melting Point (°C)	-66.8
Vapour Pressure (Pa)	1200 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	538
Flash Point (°C)	26
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	8.6

Behaviour at sea

Additional data

Colour	incolore
Odour	forte, désagréable

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	amines aromatiques
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	5 ppm
TEEL-2 (mg/m3)	5 ppm
TEEL-3 (mg/m3)	300 ppm

Ecotoxicity

2-NITROPROPANE

UN Number: 2608

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2608

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	89.09
Density of gas (kg/m3)	3.94
Boiling Point (°C)	132
Melting Point (°C)	-108
Vapour Pressure (Pa)	1000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	428
Flash Point (°C)	36
Lower explosivity limit (LEL) (volume %)	2.2

Behaviour at sea

Additional data

Colour	incolore
Odour	légèrement fruitée
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	42
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	composés nitro

IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Specific Health Concern (D3)	C - Carcinogenicity
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000
TLV-TWA	25
TEEL-1 (mg/m3)	30 ppm
TEEL-2 (mg/m3)	50 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

3,4-DICHLORO-1-BUTENE

CAS Number: 760-23-6

> **Also known as:** 3,4 DCB, 3,4-DICHLOROBUTENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	760-23-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1150 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	125
Density of gas (kg/m3)	5.48
Boiling Point (°C)	119
Melting Point (°C)	-61
Vapour Pressure (Pa)	1866 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	450
Flash Point (°C)	29
Lower explosivity limit (LEL) (volume %)	2.4
Upper explosivity limit (UEL) (volume %)	13.3

Behaviour at sea

Additional data

Colour	incolore à brun
Odour	caractéristique, irritante
Standard behavior classification	S/SD

Transportation data

Cargo group	36
State	liquide
Family name	hydrocarbures halogénés

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

3-ETHOXYPROPIONATE D'ETHYLE

Also known as: EEP

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	950 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	146.21
Density of gas (kg/m3)	6.45
Boiling Point (°C)	170
Melting Point (°C)	-100
Vapour Pressure (Pa)	90 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	377
Flash Point (°C)	58
Lower explosivity limit (LEL) (volume %)	1.05

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'ester
Standard behavior classification	FD

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable

Human toxicity threshold

Ecotoxicity

3-METHOXY-1-BUTANOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	928 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	104.14
Boiling Point (°C)	161
Melting Point (°C)	-85
Flash Point (°C)	46

Behaviour at sea

Additional data

Transportation data

State	liquide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

3-METHYLPYRIDINE

UN Number: 2313 - CAS Number: 108-99-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2313
CAS number	108-99-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	957 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	93.13
Boiling Point (°C)	144
Melting Point (°C)	-18.3
Vapour Pressure (Pa)	586 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	538
Flash Point (°C)	36
Lower explosivity limit (LEL) (volume %)	1.3
Upper explosivity limit (UEL) (volume %)	8.7

Behaviour at sea

Additional data

Colour	incolore
Odour	douce, non désagréable

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	amines aromatiques
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	5 ppm
TEEL-2 (mg/m3)	125 ppm
TEEL-3 (mg/m3)	600 ppm

Ecotoxicity

4-METHYLPYRIDINE

UN Number: 2313 - CAS Number: 108-89-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2313
CAS number	108-89-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	957 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	93.13
Density of gas (kg/m3)	4.13
Boiling Point (°C)	145
Melting Point (°C)	2.4
Vapour Pressure (Pa)	530 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	538
Flash Point (°C)	57
Lower explosivity limit (LEL) (volume %)	1.3
Upper explosivity limit (UEL) (volume %)	8.7

Behaviour at sea

Additional data

Colour	incolore à brun
Odour	douce et repoussante

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	amines aromatiques
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACETALDEHYDE

UN Number: 1089

Also known as: ACETIC ALDEHYDE, ETHANAL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1089

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	780 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	44.05
Density of gas (kg/m3)	1.032
Boiling Point (°C)	20.6
Melting Point (°C)	-123
Vapour Pressure (Pa)	99900 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	185
Flash Point (°C)	-38
Upper explosivity limit (UEL) (volume %)	57

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur fruitée
Standard behavior classification	DE

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	19
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	valve de sûreté
Family name	aldéhydes
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	10000
TLV-TWA	100
ERPG-1 (ppm)	10
ERPG-2 (ppm)	200
ERPG-3 (ppm)	1000

Ecotoxicity

ACETATE DE L'ETHER MONOBUTYLIQUE DE L' ETHYLENE GLYCOL

CAS Number: 112-07-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-07-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	942 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	160.21
Boiling Point (°C)	192.4
Melting Point (°C)	-63
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	340
Flash Point (°C)	71
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	8.5

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore
Odour	légère odeur fruitée
Standard behavior classification	E, FE, F

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	60 ppm
TEEL-2 (mg/m3)	100 ppm
TEEL-3 (mg/m3)	150 ppm

Ecotoxicity

ACETATE D'ETHYLE

UN Number: 1173 - CAS Number: 141-78-6

> **Also known as:** ACETIC ESTER, ACETIC ETHER, ACETIDIN, ACETOXYETHANE, AETHYL ACETAT, ESSIGESTER, Acetic Acid, Ethyl Ester, Ethyl Acetic Ester, Ethyl Ethanoate, Ethyl Acetate, Acetate D'Ethyle

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1173
CAS number	141-78-6
Formula	C_4H_8O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	902 [Kg/m³] at a temperature of 20°C
	918.1 [Kg/m³] at a temperature of 5°C
	911.9 [Kg/m³] at a temperature of 10°C
	902 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.49 [cSt] at a temperature of 25°C
	1.7754 [cSt] at a temperature of 5°C
	1.7875 [cSt] at a temperature of 10°C
	1.7627 [cSt] at a temperature of 20°C
Molar mass (g/mol)	88.11
Density of gas (kg/m3)	3.87
Solubility (g/L)	86000 [g/L] at a temperature of 20°C and salinity of 0‰
	54390 [g/L] at a temperature of 20°C and salinity of 0‰
	38860 [g/L] at a temperature of 20°C and salinity of 5‰
	36810 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	77
Melting Point (°C)	-83
Critical molar volume (m³/mol)	0.000286
Critical temperature (°C)	523.3
Critical pressure (Pa)	3870000

Surface tension (mN/m)	24 [mN/m] at a temperature of 20°C 23.39 [mN/m] at a temperature of 25°C 25.08 [mN/m] at a temperature of 5.6°C 24.39 [mN/m] at a temperature of 10.4°C 23.82 [mN/m] at a temperature of 18.6°C
Interfacial tension (mN/m)	6.79 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	9826 [Pa] at a temperature of 20°C 12600 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	460
Flash Point (°C)	-4
Flash Point (Pensky-Martens closed cup) (°C)	-4.4
Flash Point (Cleveland open cup) (°C)	12.8
Lower explosivity limit (LEL) (volume %)	2.2
Upper explosivity limit (UEL) (volume %)	11.5
Vapor enthalpy (J/Kg)	362500 [J/Kg] at a temperature of 77°C 404040 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	23400000
Specific heat capacity (J/(Kg·K))	1937.4
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.06
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	11.9

Behaviour at sea

Log kow	0.73
Log koc	0.78
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	3.2

Additional data

Colour	incolore
Odour	odeur agréable fruitée

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	II
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters
IMO class	3.2

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Notable risks	Reacts with oxidizers.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	10000

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
TLV-TWA	400	
TEEL-1 (mg/m3)	400 ppm	
TEEL-2 (mg/m3)	400 ppm	
TEEL-3 (mg/m3)	2000 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	5600
Lowest median lethal concentration (LC50) on crustacean (mg/l)	130

Lowest median lethal concentration (LC50) on fishes (mg/l)	455
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	2.4
Assessment factor (AF)	1000 on the short term 1000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	130 [µg/l] on the short term 2.4 [µg/l] on the long term

ACETATE D'ETHYLENEGLYCOL

Also known as: 1,2-ETHANEDIOL, MONOACETATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	104.1
Density of gas (kg/m3)	4.63
Boiling Point (°C)	182
Melting Point (°C)	-42
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	460
Flash Point (°C)	102
Lower explosivity limit (LEL) (volume %)	7.8
Upper explosivity limit (UEL) (volume %)	27.7

Behaviour at sea

Additional data

Colour	incolore
Odour	légèrement fruitée

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Oui

Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACETATE D'HEPTYLE

Also known as: ACETIC ACID, HEPTYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	875 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	158.27
Density of gas (kg/m3)	7.1
Boiling Point (°C)	192.5
Melting Point (°C)	-50.2
Flash Point (°C)	68

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Cargo group	34
State	liquide
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACETATE D'HEXYLE

UN Number: 1233 - CAS Number: 142-92-7

> **Also known as:** ACETIC ACID, HEXYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1233
CAS number	142-92-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	876 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	144.21
Density of gas (kg/m3)	6.41
Boiling Point (°C)	168/170
Melting Point (°C)	-80
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Flash Point (°C)	37
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	5.7

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide

Family name	esters
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACETATE D'ISOAMYLE

UN Number: 1104

Also known as: ACETIC ACID, ISOPENTYL ESTER, AMYLACETIC ESTER, BANANA OIL (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1104

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	876 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.19
Density of gas (kg/m3)	5.805
Boiling Point (°C)	146
Melting Point (°C)	-78
Vapour Pressure (Pa)	650 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	380
Flash Point (°C)	25
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	7.5

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore à jaune
Odour	odeur de banane
Standard behavior classification	FE

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34

State	liquide
Temperature (°C)	ambiante
Family name	esters
IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	3000
TLV-TWA	100
TEEL-1 (mg/m3)	100 ppm
TEEL-2 (mg/m3)	200 ppm
TEEL-3 (mg/m3)	1000 ppm

Ecotoxicity

ACETATE D'ISOBUTYLE

UN Number: 1213

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1213

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	871 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.16
Density of gas (kg/m3)	2.761
Boiling Point (°C)	117.5
Melting Point (°C)	-99
Vapour Pressure (Pa)	13333 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	420
Flash Point (°C)	18
Upper explosivity limit (UEL) (volume %)	15

Behaviour at sea

Additional data

Colour	incolore
Odour	agréable odeur fruitée

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	7500
TLV-TWA	150
TEEL-1 (mg/m3)	150 ppm
TEEL-2 (mg/m3)	250 ppm
TEEL-3 (mg/m3)	1300 ppm

Ecotoxicity

ACETATE D'ISOPROPYLE

UN Number: 1220 - CAS Number: 108-21-4

Also known as: ACETIC ACID, ISOPROPYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1220
CAS number	108-21-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	874 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.13
Density of gas (kg/m3)	3.52
Boiling Point (°C)	88.7
Melting Point (°C)	-73
Vapour Pressure (Pa)	6483 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	460
Lower explosivity limit (LEL) (volume %)	1.8

Behaviour at sea

Additional data

Colour	incolore
Odour	agréable odeur fruitée
Standard behavior classification	D, ED, E

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines

IMO class	3.2

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	16000
TLV-TWA	250
TEEL-1 (mg/m3)	200 ppm
TEEL-2 (mg/m3)	200 ppm
TEEL-3 (mg/m3)	1800 ppm

Ecotoxicity

ACETATE D'OCTYLE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Density (kg/m3)	868 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	172.26
Boiling Point (°C)	211
Flash Point (°C)	86

Behaviour at sea

Additional data

Transportation data

Cargo group	34

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACETATE DE 3-METHOXYBUTYLE

CAS Number: 1809-19-4

> **Also known as:** 1-BUTANOL, 3-METHOXYACETATE, BUTOXYL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	1809-19-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	960 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	146.19
Density of gas (kg/m3)	6.51
Boiling Point (°C)	135
Flash Point (°C)	77

Behaviour at sea

Additional data

Colour	incolore
Odour	âcre

Transportation data

Cargo group	34
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2

Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACETATE DE BENZYLE

CAS Number: 140-11-4

> **Also known as:** ACETIC ACID, BENZYL ESTER, ACETIC ACID, PHENYLMETHYL ESTER, alpha-ACETOXYTOLUENE, BENZYL ACETATE, BENZYL ETHANOATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	140-11-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	150.2
Density of gas (kg/m3)	6.71
Boiling Point (°C)	212
Melting Point (°C)	-52
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	460
Flash Point (°C)	102
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	8.4

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de poire

Transportation data

Cargo group	34
State	liquide
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	10

Ecotoxicity

ACETATE DE BUTYLE

UN Number: 1123 - CAS Number: 123-86-4

> **Also known as:** ACETIC ACID, n-BUTYL ESTER, n-BUTYL ACETATE, BUTYL ACETATE, 1-BUTYL ACETATE, n-BUTYL ACETATE, BUTYL ETHANOATE, Acetic Acid, N-Butyl Ester, 1-Acetoxybutane, Acetate De Butyle, N-Butyl Acetate

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1123
CAS number	123-86-4
Formula	$C_6H_{12}O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	875 [Kg/m³] at a temperature of 20°C
	896 [Kg/m³] at a temperature of 5°C
	891.6 [Kg/m³] at a temperature of 10°C
	881 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.83 [cSt] at a temperature of 20°C
	0.77 [cSt] at a temperature of 25°C
	2.7009 [cSt] at a temperature of 5°C
	2.5236 [cSt] at a temperature of 10°C
	2.3383 [cSt] at a temperature of 20°C
Molar mass (g/mol)	116.16
Density of gas (kg/m3)	5.16
Solubility (g/L)	7000 [g/L] at a temperature of 20°C and salinity of 0‰
	8500 [g/L] at a temperature of 25°C and salinity of 0‰
	7240 [g/L] at a temperature of 20°C and salinity of 0‰
	6970 [g/L] at a temperature of 20°C and salinity of 5‰
	5670 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	126
Melting Point (°C)	-77

Surface tension (mN/m)	24.88 [mN/m] at a temperature of 25°C
	25.8 [mN/m] at a temperature of 5.7°C
	25.02 [mN/m] at a temperature of 10.6°C
	24.83 [mN/m] at a temperature of 18.4°C
Interfacial tension (mN/m)	57 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	1160 [Pa] at a temperature of 20°C
	1990 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	370
Flash Point (°C)	22
Flash Point (Pensky-Martens closed cup) (°C)	22
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	7.6
Vapor enthalpy (J/Kg)	312328 [J/Kg] at a temperature of 126°C
	377582 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	37700000
Specific heat capacity (J/(Kg·K))	1961
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.1
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	28.8

Behaviour at sea

Persistence (days)	0.8
Log kow	1.82
Log koc	0.35
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	114
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	13.1

Additional data

Colour	incolore	
Odour	agréable odeur fruitée	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FED	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters
IMO class	3.2/3.3

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Notable risks	Vapours may form an explosive mixture with air.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	10000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H336	May cause drowsiness or dizziness.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P235	Keep cool.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
TLV-TWA	200	
ERPG-2 (ppm)	200	
ERPG-3 (ppm)	3000	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	2
Lowest median lethal concentration (LC50) on crustacean (mg/l)	32
Lowest median lethal concentration (LC50) on fishes (mg/l)	18
Highest no observed effect concentration (NOEC) on algae (mg/l)	296
Assessment factor (AF)	1000 on the short term 10000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	18 [µg/l] on the short term 1.8 [µg/l] on the long term

ACETATE DE CYCLOHEXYLE

UN Number: 2243 - CAS Number: 622-45-7

> **Also known as:** ACETIC ACID, CYCLOHEXYL ESTER, CYCLOHEXANYL ACETATE, CYCLOHEXYL ACETATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2243
CAS number	622-45-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	966 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	142.22
Density of gas (kg/m3)	6.32
Boiling Point (°C)	177
Melting Point (°C)	-65
Vapour Pressure (Pa)	500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	335
Flash Point (°C)	57.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur fruitée
Standard behavior classification	F/FE

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Temperature (°C)	ambiante

Family name	esters
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACETATE DE L'ETHER METHYLIQUE DE L'ETHYLENEGLYCOL

UN Number: 1189 - CAS Number: 110-49-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1189
CAS number	110-49-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1006 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	118.13
Density of gas (kg/m3)	5.29
Boiling Point (°C)	145
Melting Point (°C)	-65
Vapour Pressure (Pa)	269 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	393
Flash Point (°C)	44
Lower explosivity limit (LEL) (volume %)	1.5 (93�C)
Upper explosivity limit (UEL) (volume %)	12.3 (93�C

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'ether

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	esters

IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	R - Reprotoxicity
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	200
TEEL-1 (mg/m3)	0.3 ppm
TEEL-2 (mg/m3)	20 ppm
TEEL-3 (mg/m3)	200 ppm

Ecotoxicity

ACETATE DE L'ETHER METHYLIQUE DU PROPYLENEGLYCOL

UN Number: 3271 - CAS Number: 108-65-6

> **Also known as:** 1,2-Propylene Glycol Monomethyl Ether Acetate, 2-Acetoxy-1-Methoxypropane, Propylene Glycol Methyl Ether Acetate, Acetate D'Ether Methylique De Propylene Glycol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3271
CAS number	108-65-6
Formula	$C_6H_{12}O_3$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	969 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	132.16
Solubility (g/L)	160 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	150
Melting Point (°C)	-96.7
Critical molar volume (m³/mol)	0.000432
Critical temperature (°C)	597.8
Critical pressure (Pa)	3010000
Vapour Pressure (Pa)	496 [Pa] at a temperature of 20°C 517 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	354
Flash Point (°C)	46
Flash Point (Pensky-Martens closed cup) (°C)	42
Lower explosivity limit (LEL) (volume %)	1.3 (78�C)
Upper explosivity limit (UEL) (volume %)	13.1 (140�
Henry's constant (mol/(m³·Pa))	40.5

Behaviour at sea

Log kow	0.43
Log koc	1.8

Additional data

Colour	incolore
Odour	douce odeur d'ether

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Oxidizing agents	Oui
Combustibles	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	> 1000
Lowest median lethal concentration (LC50) on crustacean (mg/l)	> 500
Lowest median lethal concentration (LC50) on fishes (mg/l)	100
Highest no observed effect concentration (NOEC) on algae (mg/l)	> 1000
Highest no observed effect concentration (NOEC) on fishes (mg/l)	100
Assessment factor (AF)	100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	635 [µg/l] on the long term

ACETATE DE L'ETHER MONOBUTYLIQUE DU DIETHYLENE GLYCOL

> **Also known as:** 2-(2-BUTOXYETHOXY) ETHYL ACETATE, BUTYL CARBITOL ACETATE, DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE, DIGLYCOL MONOBUTYL ETHER ACETATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	985 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	204.3
Boiling Point (°C)	246
Melting Point (°C)	-32
Vapour Pressure (Pa)	13 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	290
Flash Point (°C)	105
Lower explosivity limit (LEL) (volume %)	0.6
Upper explosivity limit (UEL) (volume %)	10.7

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	D, FD, F

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	esters

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACETATE DE L'ETHER MONOETHYLIQUE DE L'ETHYLENE GLYCOL

UN Number: 1172

> **Also known as:** ACETATE DE CELLOSOLVE, ACETIC ACID-2-ETHOXY ETHYL ESTER, CELLOSOLVE ACETATE, CSAC, EKTASOLVE EE ACETATE SOLVENT

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1172

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	974 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	132.16
Density of gas (kg/m3)	6.06
Boiling Point (°C)	156
Melting Point (°C)	-61.7
Vapour Pressure (Pa)	159 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	382
Flash Point (°C)	49
Lower explosivity limit (LEL) (volume %)	1.2
Upper explosivity limit (UEL) (volume %)	12.7

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur d'ester

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	500
TEEL-1 (mg/m3)	75 ppm
TEEL-2 (mg/m3)	500 ppm
TEEL-3 (mg/m3)	500 ppm

Ecotoxicity

ACETATE DE MERCURE

UN Number: 1629

Also known as: DIACETOXYMERCURY

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1629

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3270 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	318.7
Melting Point (°C)	178

Behaviour at sea

Persistence (days)	2.7

Additional data

Colour	blanc
Odour	odeur douce de vinaigre
Marine pollutant	P
Standard behavior classification	SD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.005 (Pb)
TEEL-1 (mg/m3)	0.159
TEEL-2 (mg/m3)	0.159
TEEL-3 (mg/m3)	15.9

Ecotoxicity

ACETATE DE METHYLAMYLE

UN Number: 1233

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1233

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	860 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	144.22
Density of gas (kg/m3)	6.45
Boiling Point (°C)	146
Vapour Pressure (Pa)	507 [Pa] at a temperature of 20°C
Flash Point (°C)	42
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	5.7

Behaviour at sea

Additional data

Colour	incolore
Odour	agréable odeur fruitée

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters
IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACETATE DE METHYLE

UN Number: 1231 - CAS Number: 79-20-9

Also known as: ACETIC ACID, METHYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1231
CAS number	79-20-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	927 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	74.1
Density of gas (kg/m3)	3.61
Boiling Point (°C)	57
Melting Point (°C)	-98
Vapour Pressure (Pa)	22752 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	502
Flash Point (°C)	-6
Lower explosivity limit (LEL) (volume %)	3.1
Upper explosivity limit (UEL) (volume %)	16

Behaviour at sea

Additional data

Colour	incolore
Odour	légère et douce
Standard behavior classification	DE

Transportation data

Package group	II
Cargo group	34
State	liquide

Temperature (°C)	ambiante
Family name	esters
IMO class	3.2

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	3100
TLV-TWA	200
TEEL-1 (mg/m3)	250 ppm
TEEL-2 (mg/m3)	500 ppm
TEEL-3 (mg/m3)	3100 ppm

Ecotoxicity

ACETATE DE n-PROPYLE

UN Number: 1276 - CAS Number: 109-60-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1276
CAS number	109-60-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	886 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.13
Density of gas (kg/m3)	4.541
Boiling Point (°C)	101
Melting Point (°C)	-95
Vapour Pressure (Pa)	5332 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	430
Flash Point (°C)	10
Lower explosivity limit (LEL) (volume %)	1.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	ED

Transportation data

Package group	II
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters

IMO class	3.2

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

IDHL	8000
TLV-TWA	200
TEEL-1 (mg/m3)	250 ppm
TEEL-2 (mg/m3)	1000 ppm
TEEL-3 (mg/m3)	1700 ppm

Ecotoxicity

ACETATE DE PLOMB

UN Number: 1616

Also known as: DIBASIC LEAD ACETATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1616

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2600 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	379.3
Density of gas (kg/m3)	2600
Boiling Point (°C)	200
Melting Point (°C)	75

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	III
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.02 (Pb)
TEEL-1 (mg/m3)	0.235
TEEL-2 (mg/m3)	75
TEEL-3 (mg/m3)	157

Ecotoxicity

ACETATE DE VINYLE

UN Number: 1301 - CAS Number: 108-05-4

> **Also known as:** ACETIC ACID ETHENYL ESTER, ACETIC ACID VINYL ESTER, 1-ACETOXY ETHYLENE, Acetic Acid, Ethylene Ester, 1-Acetoxyethylene, Ethenyl Acetate, Ethenyl Ethanoate, Vinyl A Monomer, Vinyl Acetate Monomer, Vinyl Ethanoate, Acetate De Vinyle, Vinyl Acetate

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1301
CAS number	108-05-4
Formula	$C_4H_6O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	934 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.46 [cSt] at a temperature of 20°C
Molar mass (g/mol)	86.09
Density of gas (kg/m3)	3.844
Solubility (g/L)	20000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	73.1
Melting Point (°C)	-100
Surface tension (mN/m)	24 [mN/m] at a temperature of 20°C
Interfacial tension (mN/m)	30 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	11997 [Pa] at a temperature of 20°C 15300 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	425
Flash Point (°C)	-8
Flash Point (Pensky-Martens closed cup) (°C)	-8
Flash Point (Cleveland open cup) (°C)	-5
Lower explosivity limit (LEL) (volume %)	2.6
Upper explosivity limit (UEL) (volume %)	13.4
Vapor enthalpy (J/Kg)	379000 [J/Kg] at a temperature of 72.7°C

Combus enthalpy (J/Kg)	22700000
Specific heat capacity (J/(Kg·K))	1969
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.14
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	51.6

Behaviour at sea

Log kow	0.7
Log koc	1.4
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	0.16

Additional data

Colour	incolore	
Odour	légère odeur de graisse	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	ED	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	13
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	acétate de vinyle
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H351	Suspected of causing cancer.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P281	Use personal protective equipment as required.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P403 + P235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	10
ERPG-1 (ppm)	575
ERPG-2 (ppm)	500

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	12.7
Lowest median lethal concentration (LC50) on crustacean (mg/l)	12.6
Lowest median lethal concentration (LC50) on fishes (mg/l)	14
Highest no observed effect concentration (NOEC) on algae (mg/l)	6
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	45
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.6
Assessment factor (AF)	5000 on the short term 500 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	2.52 [µg/l] on the short term 1.1 [µg/l] on the long term

ACETATES D'AMYLE mélange d'isomères

UN Number: 1104 - CAS Number: 628-63-7

> **Also known as:** ACETIC ACID, n-AMYL ESTER, n-AMYLACETATE, AMYL ACETATES all isomers

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1104
CAS number	628-63-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	876 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.19
Density of gas (kg/m3)	5.805
Boiling Point (°C)	142/149
Melting Point (°C)	0.91025641
Vapour Pressure (Pa)	600 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	375/380
Flash Point (°C)	-0.276923077
Upper explosivity limit (UEL) (volume %)	10

Behaviour at sea

Additional data

Colour	incolore à jaune
Odour	odeur de banane
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide

Temperature (°C)	ambiante (froide)
Family name	esters
IMO class	3.3

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	1000
TLV-TWA	100
TEEL-1 (mg/m3)	100 ppm
TEEL-2 (mg/m3)	100 ppm
TEEL-3 (mg/m3)	1000 ppm

Ecotoxicity

ACETATES DE BUTYLE

UN Number: 1123 - CAS Number: 123-86-4

> **Also known as:** Sec-BUTYL ACETATE, Sec-BUTYL ACETATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1123
CAS number	123-86-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	872 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.16
Density of gas (kg/m3)	5.173
Boiling Point (°C)	112
Melting Point (°C)	-73
Vapour Pressure (Pa)	1500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	480
Flash Point (°C)	19
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	9.8

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore
Odour	agréable odeur fruitée
Standard behavior classification	FED

Transportation data

Package group	II/III
Cargo group	34

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters
IMO class	3.2/3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	10000
TLV-TWA	200
TEEL-1 (mg/m3)	200 ppm
TEEL-2 (mg/m3)	350ppm
TEEL-3 (mg/m3)	1700 ppm

Ecotoxicity

ACETOACETATE D'ETHYLE

CAS Number: 141-97-9

> **Also known as:** ACETOACETIC ESTER, DIACETIC ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	141-97-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1028 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.1
Density of gas (kg/m3)	5.779
Boiling Point (°C)	184
Melting Point (°C)	-44
Vapour Pressure (Pa)	0.1 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	295
Flash Point (°C)	65
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	9.5

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur agréable fruitée

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	50
TEEL-2 (mg/m3)	350
TEEL-3 (mg/m3)	500

Ecotoxicity

ACETOACETATE DE METHYLE

CAS Number: 105-45-3

> **Also known as:** ACETOACETIC ACID, METHYL ESTER, BUTANOIC ACID, 3-OXO-METHYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	105-45-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1076 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.12
Density of gas (kg/m3)	5.16
Boiling Point (°C)	169/170
Melting Point (°C)	-80
Vapour Pressure (Pa)	228 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	280
Flash Point (°C)	70
Lower explosivity limit (LEL) (volume %)	3.1
Upper explosivity limit (UEL) (volume %)	16

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACETOARSENITE DE CUIVRE

UN Number: 1585

Also known as: COPPER ACETOARSENITE, EMERALD GREEN

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1585

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	1014
Density of gas (kg/m3)	1100

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	vert
Odour	inodore
Standard behavior classification	D, SD, S

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.06 (As)
TEEL-1 (mg/m3)	3.38
TEEL-2 (mg/m3)	22
TEEL-3 (mg/m3)	22

Ecotoxicity

ACETOCHLORE

CAS Number: 34256-82-1

> **Also known as:** ACETOCHLOR, 2-CHLORO-N-ETHOXYMETHYL-N-(2-ETHYL-6-METHYLPHENYL)ACETAMIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	34256-82-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1117 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	270
Density of gas (kg/m3)	> 1.29
Boiling Point (°C)	162 (933 Pa)
Melting Point (°C)	< 0
Vapour Pressure (Pa)	0.002 [Pa] at a temperature of 20°C
Flash Point (°C)	> 100

Behaviour at sea

Additional data

Colour	légèrement ambré à violet
Odour	douce
Standard behavior classification	SD

Transportation data

State	liquide

Reactivity data

Metal(s) and alloys	Oui (Cu, mild steel)

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACETONE

UN Number: 1090 - CAS Number: 67-64-1

> **Also known as:** DIMETHYL FORMALDEHYDE, DIMETHYL KETAL, DIMETHYL KETONE, Dimethylketal, Ketone Propane, Beta-Ketopropane, Methyl Ketone, 2-Propanone, Pyroacetic Acid, Pyroacetic Ether, Propanone, Acetone

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1090
CAS number	67-64-1
Formula	C_3H_6O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	791 [Kg/m³] at a temperature of 20°C
	807 [Kg/m³] at a temperature of 5°C
	801.8 [Kg/m³] at a temperature of 10°C
	791.8 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.4 [cSt] at a temperature of 20°C
	0.39 [cSt] at a temperature of 25°C
	1.5861 [cSt] at a temperature of 5°C
	1.4467 [cSt] at a temperature of 10°C
	1.7176 [cSt] at a temperature of 20°C
Molar mass (g/mol)	58.08
Density of gas (kg/m3)	2.58
Solubility (g/L)	790000 [g/L] at a temperature of 20°C and salinity of 0‰
	790000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	56
Melting Point (°C)	-95
Critical molar volume (m³/mol)	0.000213
Critical temperature (°C)	508.1
Critical pressure (Pa)	4700000

Surface tension (mN/m)	23.7 [mN/m] at a temperature of 20°C 23.46 [mN/m] at a temperature of 25°C 24.9 [mN/m] at a temperature of 5.1°C 21.14 [mN/m] at a temperature of 9.8°C 23.44 [mN/m] at a temperature of 18°C
Vapour Pressure (Pa)	22599 [Pa] at a temperature of 20°C 30930 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	540
Flash Point (°C)	-19
Flash Point (Pensky-Martens closed cup) (°C)	-20
Flash Point (Cleveland open cup) (°C)	-15.6
Lower explosivity limit (LEL) (volume %)	2.5
Upper explosivity limit (UEL) (volume %)	12.8
Vapor enthalpy (J/Kg)	501033 [J/Kg] at a temperature of 56.2°C 533574 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	28600000
Specific heat capacity (J/(Kg·K))	2174.59
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	27
Henry's constant (mol/(m³·Pa))	4.31

Behaviour at sea

Log kow	-0.24
Log koc	0.73
Aqueous photolysis (Half-life)	1.67
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	0.69

Additional data

Colour	incolore	
Odour	odeur douce	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	DE	

Transportation data

Package group	II
Cargo group	18
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	cétones
IMO class	3.1

Reactivity data

Water	Non
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	20000

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.

TLV-TWA	750
TEEL-1 (mg/m3)	200
TEEL-2 (mg/m3)	3200
TEEL-3 (mg/m3)	5700

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	> 10000
Lowest median lethal concentration (LC50) on crustacean (mg/l)	2100
Lowest median lethal concentration (LC50) on fishes (mg/l)	6070
Highest no observed effect concentration (NOEC) on algae (mg/l)	3400
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1660
Assessment factor (AF)	1000 on the short term 500 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	2100 [µg/l] on the short term 3320 [µg/l] on the long term

ACETONITRILE

UN Number: 1648 - CAS Number: 75-05-8

> **Also known as:** CYANOMETHANE, ETHANE NITRILE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1648
CAS number	75-05-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	787 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	41.05
Density of gas (kg/m3)	1.83
Boiling Point (°C)	81
Melting Point (°C)	-45
Vapour Pressure (Pa)	11143 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	525
Lower explosivity limit (LEL) (volume %)	4.4
Upper explosivity limit (UEL) (volume %)	16

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	37
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	nitriles
IMO class	3.2

Reactivity data

Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	4000
TLV-TWA	40
TEEL-1 (mg/m3)	13
TEEL-2 (mg/m3)	320
TEEL-3 (mg/m3)	670

Ecotoxicity

ACETOPHENONNE

Also known as: ACETYLBENZENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1028 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	120.15
Boiling Point (°C)	201.9
Melting Point (°C)	20
Vapour Pressure (Pa)	140 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	571
Flash Point (°C)	999

Behaviour at sea

Additional data

Colour	colourless
Odour	douce odeur de fleurs

Transportation data

State	liquide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	30
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	350

Ecotoxicity

ACIDE ARSENIQUE solide

UN Number: 1554

Also known as: ARSENIC ACID solid

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1554

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	229.8
Boiling Point (°C)	120

Behaviour at sea

Additional data

Colour	blanc à incolore
Odour	inodore
Standard behavior classification	SD

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non

Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	32 (as As)
TLV-TWA	0.003 (As)
TEEL-1 (mg/m3)	0.4
TEEL-3 (mg/m3)	9.5

Ecotoxicity

ACIDE 2,2-DICHLOROPROPIONIQUE

CAS Number: 75-99-0

> **Also known as:** 2,2-DICHLOROPROPANOIC ACID, 2,2-DICHLOROPROPIONIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	75-99-0

Physical chemical data

Physical State (20°C)	Liquide
Molar mass (g/mol)	142.97
Boiling Point (°C)	500/900
Melting Point (°C)	185/190
Vapour Pressure (Pa)	< 10 [Pa] at a temperature of 20°C
Flash Point (°C)	> 110

Behaviour at sea

Additional data

Transportation data

State	liquide

Reactivity data

Water	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACIDE 2-CHLOROPROPIONIQUE

UN Number: 2511

> **Also known as:** 2-CHLOROPROPANOIC ACID, 2-CHLOROPROPIONIC ACID, alpha-CHLOROPROPIONIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2511

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1258 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	108.53
Density of gas (kg/m3)	4.77
Boiling Point (°C)	186
Vapour Pressure (Pa)	< 200 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	500
Flash Point (°C)	107.2
Lower explosivity limit (LEL) (volume %)	3.6 (E)

Behaviour at sea

Additional data

Colour	pale yellow
Odour	légère

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3A - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	0.1

Ecotoxicity

ACIDE 2-ETHYLHEXANOIQUE

CAS Number: 149-57-5

> **Also known as:** BUTYLETHYLACETIC ACID, 2-Ethylcaproic Acid, 2-Ethyl-Hexanoic Acid, Ethylhexoic Acid, Ethylhexanoic Acid, 2-Ethylhexanoic Acid, Acide 2-EthylhexanoÏQue

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	149-57-5
Formula	$C_8H_{16}O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	908 [Kg/m³] at a temperature of 20°C
	903.1 [Kg/m³] at a temperature of 25°C
	917.3 [Kg/m³] at a temperature of 5°C
	914.2 [Kg/m³] at a temperature of 10°C
	906.1 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	8.64 [cSt] at a temperature of 20°C
	17.911 [cSt] at a temperature of 5°C
	14.034 [cSt] at a temperature of 10°C
	9.2815 [cSt] at a temperature of 20°C
Molar mass (g/mol)	144.21
Density of gas (kg/m3)	6.45
Solubility (g/L)	2000 [g/L] at a temperature of 20°C and salinity of 0‰
	1400 [g/L] at a temperature of 25°C and salinity of 0‰
	1640 [g/L] at a temperature of 20°C and salinity of 0‰
	1680 [g/L] at a temperature of 20°C and salinity of 5‰
	960 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	227
Melting Point (°C)	-83
Critical molar volume (m³/mol)	0.000528
Critical temperature (°C)	674
Critical pressure (Pa)	2780000

Surface tension (mN/m)	28.42 [mN/m] at a temperature of 6.9°C 27.62 [mN/m] at a temperature of 11.2°C 26.86 [mN/m] at a temperature of 19.5°C
Ignition Temperature (°C)	440
Flash Point (°C)	118
Flash Point (Pensky-Martens closed cup) (°C)	114
Flash Point (Cleveland open cup) (°C)	118
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	8.64
Vapor enthalpy (J/Kg)	524563 [J/Kg] at a temperature of 25°C
Henry's constant (mol/(m³·Pa))	0.28

Behaviour at sea

Log kow	2.64
Log koc	1.43
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3

Additional data

Colour	incolore	
Odour	légère	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FD	

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui

Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Health**	
	H361	Suspected of damaging fertility or the unborn child.
TEEL-1 (mg/m3)	15	
TEEL-2 (mg/m3)	125	
TEEL-3 (mg/m3)	500	

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	70
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.45
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	18
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	36 [µg/l] on the short term

ACIDE 2-HYDROXY-4-(METHYLTHIO)-BUTANOIQUE

CAS Number: 583-91-5

Also known as: BUTYRIC ACID, 2-HYDROXY-4-METHYLTHIO-

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	583-91-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1220 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	150.2
Density of gas (kg/m3)	6.7
Ignition Temperature (°C)	160
Flash Point (°C)	121

Behaviour at sea

Additional data

Colour	brun clair
Odour	inodore
Standard behavior classification	SD/D/DE

Transportation data

Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACIDE ACETIQUE (teneur en acide >80% mass.)

UN Number: 2789 - CAS Number: 64-19-7

> **Also known as:** ACETIC ACID (>80 wt% acid), AZINZUUR, ESSIGSÄURE, ETHANOIC ACID, Ethylic Acid, Methanecarboxylic Acid, Vinegar, Vinegar Acid, Acetic Acid, Acide Acetique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2789
CAS number	64-19-7
Formula	$C_2H_4O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1051 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.16 [cSt] at a temperature of 20°C 1 [cSt] at a temperature of 25°C
Molar mass (g/mol)	60.05
Density of gas (kg/m3)	2.709
Solubility (g/L)	1050000 [g/L] at a temperature of 20°C and salinity of 0‰ 1050000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	118.1
Melting Point (°C)	17
Critical molar volume (m³/mol)	0.000171
Critical temperature (°C)	590.7
Critical pressure (Pa)	5780000
Surface tension (mN/m)	27.59 [mN/m] at a temperature of 20°C 27.1 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	1599 [Pa] at a temperature of 20°C 2093 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	485
Flash Point (°C)	40

Flash Point (Pensky-Martens closed cup) (°C)	39.4
Flash Point (Cleveland open cup) (°C)	44.4
Lower explosivity limit (LEL) (volume %)	5.4
Upper explosivity limit (UEL) (volume %)	16
Vapor enthalpy (J/Kg)	394670 [J/Kg] at a temperature of 117.9°C 389010 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	13100000
Specific heat capacity (J/(Kg·K))	2053
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.03
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	0.01

Behaviour at sea

Log kow	0.17
Log koc	1.02
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore
Odour	forte odeur de vinaigre

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Abilities	Miscible in water.

Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Non
Organic substance	Oui
Notable risks	Reacts violently with strong oxidants and strong bases.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H314	Causes severe skin burns and eye damage.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	10
ERPG-2 (ppm)	35
ERPG-3 (ppm)	250

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	20
Lowest median lethal concentration (LC50) on crustacean (mg/l)	18.9
Lowest median lethal concentration (LC50) on fishes (mg/l)	43.8
Highest no observed effect concentration (NOEC) on algae (mg/l)	10.6
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	22.7
Highest no observed effect concentration (NOEC) on fishes (mg/l)	34.3
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	189 [µg/l] on the short term 106 [µg/l] on the long term

ACIDE ACRYLIQUE

UN Number: 2218 - CAS Number: 79-10-7

> **Also known as:** ACROLEIC ACID, ACRYLIC ACID inhibited, Acrylic Acid, Inhibited, Ethylenecarboxylic Acid, Glacial Acrylic Acid, Propene Acid, 2-Propenoic Acid, Propenoic Acid, Vinylformic Acid, Acide Acrylique, Acrylic Acid

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2218
CAS number	79-10-7
Formula	$C_3H_4O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1049.7 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.24 [cSt] at a temperature of 20°C
Molar mass (g/mol)	72.06
Density of gas (kg/m3)	3.225
Solubility (g/L)	1060000 [g/L] at a temperature of 20°C and salinity of 0‰ 1060000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	141.5
Melting Point (°C)	13
Surface tension (mN/m)	28.1 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	1399 [Pa] at a temperature of 20°C 530 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	374
Flash Point (°C)	47
Flash Point (Pensky-Martens closed cup) (°C)	48
Flash Point (Cleveland open cup) (°C)	50
Lower explosivity limit (LEL) (volume %)	5.3
Upper explosivity limit (UEL) (volume %)	26
Combus enthalpy (J/Kg)	18400000
Specific heat capacity (J/(Kg·K))	2021.9

Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.03
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	0.04

Behaviour at sea

Log kow	0.39
Log koc	1.42
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore
Odour	odeur irritante

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	16°- 24°
Family name	acides organiques

Reactivity data

Water	Non
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H400	Very toxic to aquatic life.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
TLV-TWA	10	
ERPG-2 (ppm)	50	
ERPG-3 (ppm)	750	

Ecotoxicity

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	0.13
Lowest median lethal concentration (LC50) on crustacean (mg/l)	47
Lowest median lethal concentration (LC50) on fishes (mg/l)	27
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.03
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	7
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1.3 [µg/l] on the short term 0.3 [µg/l] on the long term

ACIDE ALKYLBENZENESULFONIQUE sel de sodium, en solution

CAS Number: 42615-29-2

Also known as: ALKYLBENZENESULPHONIC ACID sodium salt solution, DECYLBENZENSULFONIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	42615-29-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000/1400 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	310 to 394
Boiling Point (°C)	decomp.
Flash Point (°C)	201

Behaviour at sea

Additional data

Colour	blanc à jaune
Odour	inodore

Transportation data

State	liquide
Temperature (°C)	ambiante

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500

Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACIDE ALKYLSULFONIQUE (H2SO4 libre >5%)

UN Number: 2584

Also known as: ALKYLBENZENESULFONIC ACID (>5% free H2SO4)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2584

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	310
Boiling Point (°C)	637
Melting Point (°C)	277
Vapour Pressure (Pa)	10100 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	blanc à jaune
Odour	inodore
Standard behavior classification	DE, D

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACIDE BUTYRIQUE

UN Number: 2820 - CAS Number: 107-92-6

Also known as: BUTANOIC ACID, n-BUTYRIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2820
CAS number	107-92-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	958 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	88.1
Density of gas (kg/m3)	3.6
Boiling Point (°C)	164
Vapour Pressure (Pa)	57 [Pa] at a temperature of 20°C
Upper explosivity limit (UEL) (volume %)	10

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de beurre, rance.

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	40 ppm
TEEL-2 (mg/m3)	250 ppm
TEEL-3 (mg/m3)	250 ppm

Ecotoxicity

ACIDE CACODYLIQUE

UN Number: 1572

> **Also known as:** AGENT BLUE (T), ANSAR (T), ARSAN (T), ARSINE OXIDE, DIMETHYLHYDROXY-, CACODYLIC ACID, CHEXMATE (T), DIMETHYLARSINIC ACIDE, ERASE (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1572

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	138
Boiling Point (°C)	200

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore, teinté de bleu
Odour	inodore
Standard behavior classification	D,SD, S

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	1.5

Ecotoxicity

ACIDE CHLORHYDRIQUE en solution

UN Number: 1789 - CAS Number: 7647-01-0

> **Also known as:** CHLOROHYDRIC ACID, Hydrochloric Acid Solutions (20%), Solutions D'Acide Chlorhydrique (20%)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1789
CAS number	7647-01-0
Formula	HCl

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1190 [Kg/m³] at a temperature of 20°C 1098 [Kg/m³] at a temperature of 25°C
Kinematic viscosity (cSt)	1.2386 [cSt] at a temperature of 20°C
Molar mass (g/mol)	36.5
Density of gas (kg/m3)	1.677
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	50
Melting Point (°C)	-114
Vapour Pressure (Pa)	28000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur forte et irritante

MARPOL pollution category	Category	Description
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acides min. non oxydants

Reactivity data

Water	Non
Abilities	Solution.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	100	
Hazard statements	**Health**	
	H314	Causes severe skin burns and eye damage.
	H331	Toxic if inhaled.
Precautionary statements	**General**	
	P101	If medical advice is needed, have product container or label at hand.
	Prevention	
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P314	Get medical advice/attention if you feel unwell.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
ERPG-2 (ppm)	20	
ERPG-3 (ppm)	150	

	10 min	30 min	60 min	4 hrs	8 hrs
AEGL-1 (ppm)	1.8	1.8	1.8	1.8	1.8
AEGL-2 (ppm)	100	43	22	11	11
AEGL-3 (ppm)	620	210	100	26	26

Ecotoxicity

ACIDE CHLOROACETIQUE solide

UN Number: 1751 - CAS Number: 79-11-8

> **Also known as:** CHLOROACETIC ACID solid, CHLOROACETIC ACID, CHLOROETHANOIC ACID, Monochloroacetic Acid, Chloroacetic Acid Solutions, Solutions D'Acide Chloroacetique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1751
CAS number	79-11-8
Formula	$C_2H_3ClO_2$

Physical chemical data

Physical State (20°C)	Solide
Physical State (25°C)	Liquid
Density (kg/m3)	1580 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	94.5
Density of gas (kg/m3)	4.26
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	188
Melting Point (°C)	57
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	470
Flash Point (°C)	126

Behaviour at sea

Additional data

Colour	brun à brun
Odour	forte odeur de vinaigre

MARPOL pollution category	Category	Description
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	solide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

Water	Non
Abilities	Solution.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Physical**	
	H290	May be corrosive to metals.
	Health	
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H331	Toxic if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P234	Keep only in original container.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
	P390	Absorb spillage to prevent material damage.
	Storage	
	P406	Store in corrosive resistant/... container with a resistant inner liner.
	Disposal	
	P501	Dispose of contents/container to ...
TEEL-1 (mg/m3)	1.5 ppm	
TEEL-2 (mg/m3)	6.6 ppm	
TEEL-3 (mg/m3)	20 ppm	

Ecotoxicity

ACIDE CHLOROSULFONIQUE (avec ou sans SO3)

UN Number: 1754

> **Also known as:** CHLOROSULFONIC ACID (with or without SO3), CHLOROSULFURIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1754

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1750 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.53
Density of gas (kg/m3)	5.16
Boiling Point (°C)	155
Melting Point (°C)	-80
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore à jaune clair
Odour	odeur prononcée, choquante
Standard behavior classification	D, SD

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Oui
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

ERPG-2 (ppm)	10
ERPG-3 (ppm)	30

Ecotoxicity

ACIDE CITRIQUE

Also known as: ACILETTEN (T), CITRETTEN (T), CITRIC ACID, CITRO (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	192.1
Melting Point (°C)	153
Flash Point (°C)	100
Lower explosivity limit (LEL) (volume %)	0.28
Upper explosivity limit (UEL) (volume %)	2.29

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	SD

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non

Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	35
TEEL-2 (mg/m3)	250
TEEL-3 (mg/m3)	500

Ecotoxicity

ACIDE CRESYLIQUE déphénolisé

UN Number: 2022

Also known as: CRESYLIC ACID dephenolized, DEPHENOLISED CRESOLS

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2022

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1040 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	250
Melting Point (°C)	-12
Vapour Pressure (Pa)	133 (37.8°C) [Pa] at a temperature of 20°C
Flash Point (°C)	86

Behaviour at sea

Additional data

Colour	brun foncé
Odour	odeur phéNonlique
Standard behavior classification	SD

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
IMO class	6.1

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACIDE DECANOIQUE

CAS Number: 334-48-5

> **Also known as:** n-CAPRIC ACID, CAPRINIC ACID, DECANOIC ACID, n-DECANOIC ACID, DECOIC ACID, n-DECYLIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	334-48-5

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	893 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	172.27
Density of gas (kg/m3)	7.66
Boiling Point (°C)	268/270
Melting Point (°C)	31/32
Flash Point (°C)	> 110

Behaviour at sea

Additional data

Colour	blanc
Odour	rance, déplaisante

Transportation data

State	solide
Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

Metal(s) and alloys	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACIDE DI-(2-ETHYLHEXYL)PHOSPHORIQUE

UN Number: 1902 - CAS Number: 298-07-7

> **Also known as:** BIS(2-ETHYLHEXYL)HYDROGEN PHOSPHATE, BIS(2-ETHYLHEXYL)ORTHOPHOSPHATE, DEHPA, DI-(2-ETHYLHEXYL)PHOSPHATE, DI-(2-ETHYLHEXYL)PHOSPHORIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1902
CAS number	298-07-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	977 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	322.4
Boiling Point (°C)	decomp.
Melting Point (°C)	< -60
Vapour Pressure (Pa)	< 100 [Pa] at a temperature of 20°C
Flash Point (°C)	196

Behaviour at sea

Additional data

Colour	jaune clair
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante

Reactivity data

Water	Non

Metal(s) and alloys	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	0.06
TEEL-2 (mg/m3)	0.4

Ecotoxicity

ACIDE DICHLORO-2,4 PHENOXYACETIQUE solide

UN Number: 3077

> **Also known as:** AGRIBEN, AGROTECT, AMIDOX, AMOXONE, AQUA-KEEN, CLOFIBRAAT, 2,4-D, DACAMINE, DECAMINE, 2,4-DICHLOROPHENOXY ACETIC ACID solid, DICITOX, DIOTOX

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3077

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	221
Melting Point (°C)	140
Vapour Pressure (Pa)	99 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	blanc à marron
Odour	inodore

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACIDE ETHYLENE DIAMINE TETRA-ACETIQUE

CAS Number: #Error

Also known as: EDTA, ENDRATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	#Error

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	860 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	292.2
Melting Point (°C)	240

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

State	solide
Temperature (°C)	ambiante

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACIDE FLUOROSILICIQUE

UN Number: 1778 - CAS Number: 16961-83-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1778
CAS number	16961-83-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1290 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	144.09
Density of gas (kg/m3)	6.44
Boiling Point (°C)	109
Melting Point (°C)	1.727272727
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	piquante, désagréable

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Family name	acides min. non-oxydants

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	9.48
TEEL-2 (mg/m3)	15.8
TEEL-3 (mg/m3)	50

Ecotoxicity

ACIDE FORMIQUE

UN Number: 1779 - CAS Number: 64-18-6

Also known as: Methanoic Acid, Formilic Acid, Aminic Acid, Formic Acid, Acide Formique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1779
CAS number	64-18-6
Formula	CH_2O_2

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1220 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.3172 [cSt] at a temperature of 25°C
Molar mass (g/mol)	46.03
Density of gas (kg/m3)	2.051
Solubility (g/L)	1000000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	101
Melting Point (°C)	8.3
Critical temperature (°C)	588
Surface tension (mN/m)	34.38 [mN/m] at a temperature of 25°C
Interfacial tension (mN/m)	1.32 [mN/m] at a temperature of 25°C and salinity of 0‰
Vapour Pressure (Pa)	4399 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	600
Flash Point (°C)	69
Flash Point (Pensky-Martens closed cup) (°C)	69
Flash Point (Cleveland open cup) (°C)	50
Lower explosivity limit (LEL) (volume %)	18
Upper explosivity limit (UEL) (volume %)	57
Vapor enthalpy (J/Kg)	492982 [J/Kg] at a temperature of 101°C 436710 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	5531656
Specific heat capacity (J/(Kg·K))	2151

Henry's constant (mol/(m³·Pa))	0.017

Behaviour at sea

Log kow	-0.22
Log koc	0
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3.2

Additional data

Colour	incolore
Odour	odeur pénétrante

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	acides organiques

Reactivity data

Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight

Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3C - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	30	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
	H331	Toxic if inhaled.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
TEEL-1 (mg/m3)	0.92 ppm	
TEEL-2 (mg/m3)	0.92 ppm	
TEEL-3 (mg/m3)	30 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	34
Lowest median lethal concentration (LC50) on fishes (mg/l)	46
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	200 [µg/l] on the short term

ACIDE GRAS DE SUIF

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	> 200 (E)
Flash Point (°C)	200 (E)

Behaviour at sea

Additional data

Transportation data

Family name	esters

Reactivity data

Base(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACIDE LACTIQUE

CAS Number: 50-21-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	50-21-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	90

Behaviour at sea

Additional data

Colour	incolore à jaune
Odour	odeur légèrement désagréable

Transportation data

State	syrupy liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	40
TEEL-2 (mg/m3)	300
TEEL-3 (mg/m3)	500

Ecotoxicity

Acide Laurique

CAS Number: 143-07-7

> **Also known as:** Dodecanoic Acid, Dodecylic Acid, Vulvic Acid, Laurostearic Acid, Lauric Acid, Acide Laurique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	143-07-7
Formula	$C_{12}H_{24}O_2$

Physical chemical data

Physical State (25°C)	Solid
Kinematic viscosity (cSt)	8.41 [cSt] at a temperature of 50°C
Molar mass (g/mol)	200.318
Solubility (g/L)	4.81 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	225
Melting Point (°C)	43.8
Critical temperature (°C)	743
Critical pressure (Pa)	1930000
Surface tension (mN/m)	26.6 [mN/m] at a temperature of 70°C
Combus enthalpy (J/Kg)	37009655
Henry's constant (mol/(m³·Pa))	0.94

Behaviour at sea

Log kow	4.2
Log koc	2.5
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	255

Additional data

MARPOL pollution category	Category	Description
	X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Health**	
	H318	Causes serious eye damage.
Precautionary statements	**Prevention**	
	P280	Wear protective gloves/protective clothing/eye protection/face protection.

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	35

Highest no observed effect concentration (NOEC) on algae (mg/l)	4.4
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1.5
Highest no observed effect concentration (NOEC) on fishes (mg/l)	6.4

ACIDE METHACRYLIQUE stabilisé

UN Number: 2531 - CAS Number: 79-41-4

> **Also known as:** 2-Methacrylic Acid, 2-Methyl-2-Propenoic Acid, Methacrylic Acid, Acide Methacrylique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2531
CAS number	79-41-4
Formula	$C_4H_6O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Solid
Density (kg/m3)	1010 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.28 [cSt] at a temperature of 20°C
Molar mass (g/mol)	86.1
Density of gas (kg/m3)	3.87
Solubility (g/L)	89000 [g/L] at a temperature of 20°C and salinity of 0‰ 89000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	161
Melting Point (°C)	15
Surface tension (mN/m)	65.9 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	90 [Pa] at a temperature of 20°C 133 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	400
Flash Point (°C)	77
Flash Point (Cleveland open cup) (°C)	77
Lower explosivity limit (LEL) (volume %)	2.4
Upper explosivity limit (UEL) (volume %)	8.8
Specific heat capacity (J/(Kg·K))	1871
Henry's constant (mol/(m³·Pa))	0.039

Behaviour at sea

Log kow	0.93

Log koc	0.35
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3.1

Additional data

Colour	incolore
Odour	piquante, âcre, repoussante

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H311	Toxic in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
Precautionary statements	**Prevention**	
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Storage	
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	20	
TEEL-1 (mg/m3)	6.7 ppm	
TEEL-2 (mg/m3)	61 ppm	
TEEL-3 (mg/m3)	220 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	45
Lowest median lethal concentration (LC50) on crustacean (mg/l)	140
Lowest median lethal concentration (LC50) on fishes (mg/l)	85
Highest no observed effect concentration (NOEC) on algae (mg/l)	8.2
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	53
Highest no observed effect concentration (NOEC) on fishes (mg/l)	10
Assessment factor (AF)	50 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	164 [µg/l] on the short term

ACIDE n-HEPTANOIQUE

CAS Number: 111-14-8

Also known as: ENANTHIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	111-14-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.19
Density of gas (kg/m3)	5.8
Boiling Point (°C)	223
Melting Point (°C)	-7.5
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Flash Point (°C)	107

Behaviour at sea

Additional data

Colour	incolore
Odour	rance
Standard behavior classification	FD

Transportation data

State	liquide
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	100 ppm
TEEL-3 (mg/m3)	600 ppm

Ecotoxicity

ACIDE n-HEXANOIQUE

UN Number: 2829 - CAS Number: 142-62-1

Also known as: BUTYLACETIC ACID, n-CAPROIC ACID, CAPRONIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2829
CAS number	142-62-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	927 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	110.16
Density of gas (kg/m3)	5.16
Boiling Point (°C)	202/203
Melting Point (°C)	-3
Flash Point (°C)	104

Behaviour at sea

Additional data

Colour	incolore à légerèment jaune
Odour	odeur de chèvre
Standard behavior classification	FD/FED

Transportation data

Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Non

Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	100
TEEL-3 (mg/m3)	500

Ecotoxicity

ACIDE NEODECANOIQUE

CAS Number: 26896-20-8

Also known as: 2,2-DIMETHYLOCTANOIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	26896-20-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	920 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	172.27
Density of gas (kg/m3)	7.74
Boiling Point (°C)	250/257
Melting Point (°C)	< 40
Flash Point (°C)	94

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	40
TEEL-2 (mg/m3)	300
TEEL-3 (mg/m3)	500

Ecotoxicity

ACIDE NITRILOTRIACETIQUE ET SELS

CAS Number: 5094-31-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	5094-31-3

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	191

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating

Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	100
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

Acide Nitrique

CAS Number: 7697-37-2

Also known as: Hydrogen Nitrate, Aqua Fortis, Nitric Acid, Acide Nitrique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	7697-37-2
Formula	HNO_3

Physical chemical data

Physical State (25°C)	Liquid
Molar mass (g/mol)	63.012
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	83
Melting Point (°C)	-41.6
Vapor enthalpy (J/Kg)	620517 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	1744

Behaviour at sea

Log kow	0.21
Log koc	1.21

Additional data

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

Abilities	Miscible in water.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Physical**	
	H272	May intensify fire, oxidiser.
	H290	May be corrosive to metals.
	Health	
	H314	Causes severe skin burns and eye damage.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P220	Keep/Store away from clothing/.../combustible materials.
	P221	Take any precaution to avoid mixing with combustibles...
	P234	Keep only in original container.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P363	Wash contaminated clothing before reuse.
	P390	Absorb spillage to prevent material damage.
	Storage	
	P404	Store in a closed container.
	P406	Store in corrosive resistant/... container with a resistant inner liner.
	Disposal	
	P501	Dispose of contents/container to ...

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	180

ACIDE NITRIQUE (contenant plus de 70% d'acide nitrique)

UN Number: 2031

Also known as: AQUAFORTIS, AZOTIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2031

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1490 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	63
Density of gas (kg/m3)	2.838
Boiling Point (°C)	121
Melting Point (°C)	-42
Vapour Pressure (Pa)	6400 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à brun clair
Odour	odeur choquante

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acide nitrique

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	100
ERPG-3 (ppm)	78

Ecotoxicity

ACIDE NONANOIQUE

CAS Number: 112-05-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-05-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	158.2
Boiling Point (°C)	255
Melting Point (°C)	12
Vapour Pressure (Pa)	< 10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	405
Flash Point (°C)	114

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	FD

Transportation data

Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACIDE OCTANOIQUE

CAS Number: 134-07-2

> **Also known as:** C-8 ACID, n-CAPRYLIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	134-07-2

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	910 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	144.21
Density of gas (kg/m3)	6.45
Boiling Point (°C)	237
Melting Point (°C)	16
Flash Point (°C)	110

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACIDE OLEIQUE

CAS Number: 112-80-1

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-80-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	890 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	277
Boiling Point (°C)	222
Melting Point (°C)	13.4
Ignition Temperature (°C)	363
Flash Point (°C)	189

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	odeur douce

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	0.05
TEEL-2 (mg/m3)	0.4
TEEL-3 (mg/m3)	500

Ecotoxicity

ACIDE OXALIQUE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	126.07
Density of gas (kg/m3)	5.676
Boiling Point (°C)	157
Melting Point (°C)	102

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	90
TLV-TWA	0.2
TEEL-2 (mg/m3)	40
TEEL-3 (mg/m3)	500

Ecotoxicitv

ACIDE PENTANOIQUE

CAS Number: 109-52-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	109-52-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	939 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.13
Boiling Point (°C)	185
Melting Point (°C)	-18
Vapour Pressure (Pa)	21 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	400
Flash Point (°C)	96
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	7.6

Behaviour at sea

Additional data

Colour	incolore
Odour	désagréable

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui

Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ACIDE PHOSPHORIQUE liquide

UN Number: 1805 - CAS Number: 7664-38-2

> **Also known as:** Orthophosphoric Acid, O-Phosphoric Acid, White Phosphoric Acid, Phosphoric Acid, Hydrogen Phosphate, Acide Phosphorique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1805
CAS number	7664-38-2
Formula	H_3PO_4

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1892 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	140 [cSt] at a temperature of 20°C 100 [cSt] at a temperature of 25°C
Molar mass (g/mol)	98
Solubility (g/L)	1863000 [g/L] at a temperature of 20°C and salinity of 0‰ 1863000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	130
Melting Point (°C)	42
Specific heat capacity (J/(Kg·K))	1480
Henry's constant (mol/(m³·Pa))	0

Behaviour at sea

Log kow	0.21
Log koc	1.21
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	1
Biodegradation in marine environment (Half-life) (days)	Not biodegradable

Additional data

Colour	incolore

Odour	inodore

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acides min. non-oxydants

Reactivity data

Water	Oui
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui
Notable risks	Reacts to heat Reacts with other compouds.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2500	
Hazard statements	**Health**	
	H314	Causes severe skin burns and eye damage.
Precautionary statements	**Prevention**	
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
TLV-TWA	0.25	
TEEL-2 (mg/m3)	500	
TEEL-3 (mg/m3)	500	

Ecotoxicity

Highest no observed effect concentration (NOEC) on algae (mg/l)	100
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	56

ACIDE PROPIONIQUE en solution (avec plus de 80% d'acide)

UN Number: 1848 - CAS Number: 598-78-7

> **Also known as:** Propanoic Acid, Methylacetic Acid, Ethanecarboxylic Acid, Ethylformic Acid, Carboxyethane, Propionic Acid, Acide Propionique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1848
CAS number	598-78-7
Formula	$C_3H_6O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	995 [Kg/m³] at a temperature of 20°C 988.2 [Kg/m³] at a temperature of 25°C
Kinematic viscosity (cSt)	1.03 [cSt] at a temperature of 25°C
Molar mass (g/mol)	74.08
Density of gas (kg/m3)	3.302
Solubility (g/L)	100000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	141
Melting Point (°C)	-22
Critical molar volume (m³/mol)	0.000233
Critical temperature (°C)	598.5
Critical pressure (Pa)	4670000
Surface tension (mN/m)	26.2 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	1291 [Pa] at a temperature of 20°C 470 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	485
Flash Point (°C)	50
Flash Point (Pensky-Martens closed cup) (°C)	52
Flash Point (Cleveland open cup) (°C)	57

Lower explosivity limit (LEL) (volume %)	2.9
Upper explosivity limit (UEL) (volume %)	14.8
Vapor enthalpy (J/Kg)	433861 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	20630678
Specific heat capacity (J/(Kg·K))	2063
Henry's constant (mol/(m³·Pa))	0.045

Behaviour at sea

Log kow	0.3
Log koc	0.16
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3.2

Additional data

Colour	incolore
Odour	forte odeur rance

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Health**	
	H314	Causes severe skin burns and eye damage.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	Storage	
	P403 + P235	Store in a well-ventilated place. Keep cool.
TLV-TWA	10	
TEEL-1 (mg/m3)	10 ppm	
TEEL-2 (mg/m3)	15 ppm	
TEEL-3 (mg/m3)	350 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	50
Lowest median lethal concentration (LC50) on fishes (mg/l)	51
Highest no observed effect concentration (NOEC) on fishes (mg/l)	188

Assessment factor (AF)	10000 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	50 [µg/l] on the short term

ACIDE SULFURIQUE (avec plus de 51% d'acide)

UN Number: 1830 - CAS Number: 7664-93-9

> **Also known as:** Battery Acid, Dihydrogen Sulfate++, Electrolyte Acid, Hydrogen Sulfate, Mattling Acid, Oil Of Vitriol, Spirit Of Sulfur, Sulphuric Acid, Dipping Acid, Sulfuric Acid, Acide Sulfurique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1830
CAS number	7664-93-9
Formula	H_2SO_4

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1840 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	21 [cSt] at a temperature of 25°C
Molar mass (g/mol)	98.08
Density of gas (kg/m3)	4.386
Solubility (g/L)	1840000 [g/L] at a temperature of 20°C and salinity of 0‰ 1840000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	340
Melting Point (°C)	-35
Surface tension (mN/m)	5.51 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	10100 [Pa] at a temperature of 20°C
Specific heat capacity (J/(Kg·K))	1416
Henry's constant (mol/(m³·Pa))	20.1

Behaviour at sea

Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	1
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	0

Additional data

Colour	incolore à brun foncé
Odour	inodore.Quand chaud, choquante

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	DE, D

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acide sulfurique

Reactivity data

Water	Oui
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Oui
Organic substance	Oui
Notable risks	Reacts with water. Reacts to heat Oxidizer Reacts with other compounds.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury

Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	12.5	
Hazard statements	**Health**	
	H314	Causes severe skin burns and eye damage.
Precautionary statements	**Prevention**	
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
ERPG-1 (ppm)	2 mg	
ERPG-2 (ppm)	10 mg	
ERPG-3 (ppm)	30 mg	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	0.13
Lowest median lethal concentration (LC50) on crustacean (mg/l)	29
Lowest median lethal concentration (LC50) on fishes (mg/l)	16
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.13
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.15
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.025
Assessment factor (AF)	1000 on the short term 500 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	0.13 [µg/l] on the short term 0.05 [µg/l] on the long term

ACIDE SULFURIQUE (fumant)

UN Number: 1831 - CAS Number: 7664-93-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1831
CAS number	7664-93-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1920 [Kg/m³] at a temperature of 20°C
Density of gas (kg/m3)	3.483
Boiling Point (°C)	139
Vapour Pressure (Pa)	900 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non

Combustibles	Oui
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

ERPG-1 (ppm)	2 mg
ERPG-2 (ppm)	10 mg
ERPG-3 (ppm)	30 mg

Ecotoxicity

ACIDE SULPHURIQUE (résiduaire)

UN Number: 1832 - CAS Number: 7664-93-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1832
CAS number	7664-93-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1390 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.1
Density of gas (kg/m3)	4.386
Boiling Point (°C)	100
Melting Point (°C)	-32
Vapour Pressure (Pa)	10100 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à brun foncé
Standard behavior classification	DE, D

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acide sulfurique

Reactivity data

Water	Oui
Acid(s)	Oui

Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	20
TLV-TWA	0.25
ERPG-1 (ppm)	2 mg
ERPG-2 (ppm)	10 mg
ERPG-3 (ppm)	30 mg

Ecotoxicity

ACIDE TANNIQUE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	1701

Behaviour at sea

Additional data

Colour	jaune clair à marron
Odour	odeur de cire

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACIDE TETRAZOL-1-ACETIQUE

UN Number: 407

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	407

Physical chemical data

Physical State (20°C)	Solide

Behaviour at sea

Additional data

Odour	odeur fruitée

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	acide nitrique
IMO class	1.4 C

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACIDE TRIDECANOIQUE

CAS Number: 638-53-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	638-53-9

Physical chemical data

Physical State (20°C)	Solide
Melting Point (°C)	41/42
Flash Point (°C)	> 110

Behaviour at sea

Additional data

Colour	blanc

Transportation data

Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible

Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACIDE TRIMETHYLACETIQUE

CAS Number: 75-98-9

> **Also known as:** alpha,alpha-DIMETHYLPROPIONIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	75-98-9

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.13
Density of gas (kg/m3)	4.50 (E)
Boiling Point (°C)	164
Melting Point (°C)	36
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Flash Point (°C)	63

Behaviour at sea

Additional data

Colour	coloré
Odour	inodore

Transportation data

Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACIDE UNDECANOIQUE

CAS Number: 112-37-8

> **Also known as:** 1-DECANECARBOXYLIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-37-8

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	891 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	186.3
Density of gas (kg/m3)	8.28
Boiling Point (°C)	228
Melting Point (°C)	28.5
Flash Point (°C)	> 110

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

State	solide
Temperature (°C)	ambiante
Family name	acides organiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

Metal(s) and alloys	Oui (common metals)
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACIDES NAPHTHENIQUES

UN Number: 3082 - CAS Number: 1338-24-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	1338-24-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	982 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	200
Boiling Point (°C)	140-370
Melting Point (°C)	-35
Flash Point (°C)	149

Behaviour at sea

Additional data

Colour	or à noir
Odour	inodore

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Interference with coastal amenities (E2)	FD - Floater/Dissolver

Human toxicity threshold

Ecotoxicity

ACROLEINE

UN Number: 1092

Also known as: ACRALDEHYDE, ACROLEIN inhibited, ALLYL ALDEHYDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1092

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	843 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	56.1
Density of gas (kg/m3)	2.451
Boiling Point (°C)	53
Melting Point (°C)	-88
Vapour Pressure (Pa)	29681 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	278
Flash Point (°C)	-20
Lower explosivity limit (LEL) (volume %)	2.8
Upper explosivity limit (UEL) (volume %)	31

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	odeur prononcée et irritante
Standard behavior classification	DE

Transportation data

Cargo group	19
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Family name	aldéhydes
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.1
ERPG-1 (ppm)	0.05
ERPG-2 (ppm)	0.15
ERPG-3 (ppm)	1.5

Ecotoxicity

ACRYLAMIDE

UN Number: 2074 - CAS Number: 79-06-1

Also known as: ACRYLIC AMIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2074
CAS number	79-06-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1050 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	71
Density of gas (kg/m3)	1.29
Melting Point (°C)	84
Vapour Pressure (Pa)	2527 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	424
Flash Point (°C)	999

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	0.01
TEEL-1 (mg/m3)	7.5
TEEL-2 (mg/m3)	60
TEEL-3 (mg/m3)	60

Ecotoxicity

ACRYLATE D'ETHYL-2 HEXYLE

CAS Number: 103-11-7

> **Also known as:** ACRYLIC ACID, 2-ETHYLHEXYL ESTER, 2-Ethyl-1-Hexyl Acrylate, 2-Ethylhexyl 2-Propenoate, 2-Propenoic Acid, 2-Ethylhexyl Ester, Acrylic Acid, 2-Ethylhexyl Ester, Ethylhexyl Acrylate, 2-Ethylhexylprop-2-Enoate, 2-Ethylhexyl Acrylate, Acrylate D'Ethyl 2-Hexyle

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	103-11-7
Formula	$C_{11}H_{20}O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	885 [Kg/m³] at a temperature of 20°C
	897 [Kg/m³] at a temperature of 5°C
	891.8 [Kg/m³] at a temperature of 10°C
	886.1 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	4.4482 [cSt] at a temperature of 5°C
	4.1826 [cSt] at a temperature of 10°C
	6.2634 [cSt] at a temperature of 20°C
Molar mass (g/mol)	184.2
Density of gas (kg/m3)	8.192
Solubility (g/L)	100 [g/L] at a temperature of 25°C and salinity of 0‰
	36 [g/L] at a temperature of 20°C and salinity of 0‰
	35 [g/L] at a temperature of 20°C and salinity of 5‰
	21 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	214
Melting Point (°C)	-90
Surface tension (mN/m)	26 [mN/m] at a temperature of 20°C
	27.91 [mN/m] at a temperature of 5.4°C
	27.68 [mN/m] at a temperature of 11.3°C
	26.82 [mN/m] at a temperature of 19.3°C
Interfacial tension (mN/m)	30 [mN/m] at a temperature of 20°C and salinity of 0‰

Vapour Pressure (Pa)	13 [Pa] at a temperature of 20°C 24 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	384
Flash Point (°C)	82
Flash Point (Pensky-Martens closed cup) (°C)	87.5
Lower explosivity limit (LEL) (volume %)	0.87
Upper explosivity limit (UEL) (volume %)	6.4
Combus enthalpy (J/Kg)	33800000
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	45

Behaviour at sea

Log kow	4.09
Log koc	3.73
Biodegradation in estuary environment (Half-life) (days)	6205
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	412

Additional data

Colour	incolore
Odour	odeur prononcée

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	II
Cargo group	14
State	liquide
Temperature (°C)	< 38°
Pressure (Pa)	ambiante
Family name	acrylates

Reactivity data

Water	Non

Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Health**	
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H335	May cause respiratory irritation.
TEEL-1 (mg/m3)	1.5	
TEEL-2 (mg/m3)	10	
TEEL-3 (mg/m3)	10	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	1.71
Lowest median lethal concentration (LC50) on crustacean (mg/l)	1.3
Lowest median lethal concentration (LC50) on fishes (mg/l)	1.8
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.8

Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.19
Assessment factor (AF)	100 on the short term 10000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	13 [µg/l] on the short term 0.13 [µg/l] on the long term

ACRYLATE D'ETHYLE

UN Number: 1917 - CAS Number: 140-88-5

> **Also known as:** ACRYLIC ACID ETHYL ESTER, Ethoxycarbonylethylene, Ethyl Acrylic Ester, Ethyl Propenoate, Ethyl 2-Propenoate, 2-Propenoic Acid, Ethyl Ester, Ethyl Acrylate, Acrylate D'Ethyle

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1917
CAS number	140-88-5
Formula	$C_5H_8O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	923 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.75 [cSt] at a temperature of 20°C 0.6 [cSt] at a temperature of 25°C
Molar mass (g/mol)	100.12
Density of gas (kg/m3)	3.87
Solubility (g/L)	17500 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	99
Melting Point (°C)	-75
Vapour Pressure (Pa)	11447 [Pa] at a temperature of 20°C 5150 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	350
Flash Point (Pensky-Martens closed cup) (°C)	8
Flash Point (Cleveland open cup) (°C)	6.7
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	9.5
Vapor enthalpy (J/Kg)	646549 [J/Kg] at a temperature of 99.5°C
Combus enthalpy (J/Kg)	25700000
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.09
Rad fraction (%)	23

Henry's constant (mol/(m³·Pa))	39.82

Behaviour at sea

Log kow	1.25
Log koc	1.62
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	2.1

Additional data

Colour	incolore	
Odour	odeur fruitée	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	ED	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	14
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	acrylates
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

Notable risks	Polymerization.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H331	Toxic if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P240	Ground/bond container and receiving equipment.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	Disposal	
	P501	Dispose of contents/container to ...

ERPG-1 (ppm)	0.01
ERPG-2 (ppm)	30
ERPG-3 (ppm)	300

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	5.5
Lowest median lethal concentration (LC50) on crustacean (mg/l)	7.9
Lowest median lethal concentration (LC50) on fishes (mg/l)	4.6
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.19
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.78
Assessment factor (AF)	100 on the short term 1000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	46 [µg/l] on the short term 0.19 [µg/l] on the long term

ACRYLATE D'HYDROXY-2 ETHYLE

CAS Number: 818-61-1

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	818-61-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.1
Boiling Point (°C)	310
Melting Point (°C)	-60.2
Vapour Pressure (Pa)	10100 [Pa] at a temperature of 20°C
Flash Point (°C)	101
Lower explosivity limit (LEL) (volume %)	1.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce et agréable
Standard behavior classification	DE, D

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-3 (mg/m3)	50

Ecotoxicity

ACRYLATE D'ISODECYLE stabilisé

Also known as: ACRYLIC ACID, ISODECYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	885 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	212.4
Density of gas (kg/m3)	9.42

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore
Odour	légère odeur
Standard behavior classification	D, FD, F

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non

Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ACRYLATE DE BUTYLE

UN Number: 2348 - CAS Number: 141-32-2

> **Also known as:** ACRYLIC ACID, N-BUTYL ESTER, ACRYLIC ACID, BUTYL ESTER, 2-AGROPENOIC ACID, N-BUTYL ESTER, BUTYL ACRYLATE, n-BUTYL ACRYLATE inhibited, BUTYL ACRYLATE MONOMER (Inhibited), n-BUTYL ANYLATE, BUTYL-2-PROPENOATE, n-BUTYL 2-PROPENOATE, Acrylic Acid, Butyl Ester, Acrylic Acid, N-Butyl Ester, Butyl 2-Propenoate, 2-Propenoic Acid, Butyl Ester, 2-Propenoic Acid, N-Butyl Ester, Acrylate De N-Butyle, N-Butyl Acrylate, Acrylate De Butyle

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2348
CAS number	141-32-2
Formula	$C_7H_{12}O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	899 [Kg/m³] at a temperature of 20°C
	913.1 [Kg/m³] at a temperature of 5°C
	908.5 [Kg/m³] at a temperature of 10°C
	900.1 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	2.8255 [cSt] at a temperature of 5°C
	2.7518 [cSt] at a temperature of 10°C
	2.6219 [cSt] at a temperature of 20°C
Molar mass (g/mol)	128.17
Density of gas (kg/m3)	5.702
Solubility (g/L)	2000 [g/L] at a temperature of 25°C and salinity of 0‰
	1610 [g/L] at a temperature of 20°C and salinity of 0‰
	1340 [g/L] at a temperature of 20°C and salinity of 5‰
	1440 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	149
Melting Point (°C)	-65

Surface tension (mN/m)	20 [mN/m] at a temperature of 25°C
	26.77 [mN/m] at a temperature of 6.1°C
	26.56 [mN/m] at a temperature of 11.3°C
	25.63 [mN/m] at a temperature of 19.1°C
Interfacial tension (mN/m)	60 [mN/m] at a temperature of 25°C and salinity of 0‰
Vapour Pressure (Pa)	9100 [Pa] at a temperature of 20°C
	727 [Pa] at a temperature of 25°C
Flash Point (°C)	37
Flash Point (Pensky-Martens closed cup) (°C)	39
Flash Point (Cleveland open cup) (°C)	47.8
Lower explosivity limit (LEL) (volume %)	1.5
Upper explosivity limit (UEL) (volume %)	9.9
Combus enthalpy (J/Kg)	29400000
Specific heat capacity (J/(Kg·K))	1958
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	46.59

Behaviour at sea

Log kow	2.36
Log koc	1.54
Aqueous photolysis (Half-life)	0.0138
Biodegradation in estuary environment (Half-life) (days)	1100
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	13.1

Additional data

Colour	incolore
Odour	odeur parfumée

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	14

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	acrylates
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non
Notable risks	Polymerize easily, inhibitor in comercial products.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Health**	
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
TLV-TWA	10	
ERPG-1 (ppm)	0.05	
ERPG-2 (ppm)	25	
ERPG-3 (ppm)	250	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	2.6
Lowest median lethal concentration (LC50) on crustacean (mg/l)	8.2
Lowest median lethal concentration (LC50) on fishes (mg/l)	2.1
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.136
Assessment factor (AF)	100 on the short term 10000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	21 [µg/l] on the short term 0.21 [µg/l] on the long term

ACRYLATE DE DECYLE

UN Number: 3082 - CAS Number: 2156-96-9

> **Also known as:** ACRYLIC ACID, DECYL ESTER, DECYL ACRYLATE, n-DECYL ACRYLATE, DECYL ACRYLATE, inhibited, DECYL PROP-2-ENOATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	2156-96-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	878 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	212.37
Density of gas (kg/m3)	9.42 (E)
Boiling Point (°C)	263
Melting Point (°C)	< 0
Flash Point (°C)	227

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	14
State	liquide
Temperature (°C)	ambiante
Family name	acrylates

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui (Cu, Zn)
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	5 - Very highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ACRYLATE DE METHYLE

UN Number: 1919 - CAS Number: 96-33-3

> **Also known as:** ACRYLIC ACID, METHYL ESTER, CURITHANE 103 (T), Acrylic Acid Methyl Ester, Methyl Prop-2-Enoate, Methyl Acrylate, Acrylate De Methyle

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1919
CAS number	96-33-3
Formula	$C_4H_6O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	956 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.5055 [cSt] at a temperature of 20°C
Molar mass (g/mol)	86.09
Density of gas (kg/m3)	3.831
Solubility (g/L)	52000 [g/L] at a temperature of 20°C and salinity of 0‰ 49400 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	80.8
Melting Point (°C)	-75
Critical molar volume (m³/mol)	0.000265
Critical temperature (°C)	536
Critical pressure (Pa)	4357000
Surface tension (mN/m)	24.2 [mN/m] at a temperature of 20°C
Interfacial tension (mN/m)	30 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	933 [Pa] at a temperature of 20°C 14665 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	390
Flash Point (°C)	-3
Flash Point (Pensky-Martens closed cup) (°C)	-2.8
Flash Point (Cleveland open cup) (°C)	-3
Lower explosivity limit (LEL) (volume %)	2.8

Upper explosivity limit (UEL) (volume %)	25
Vapor enthalpy (J/Kg)	384481 [J/Kg] at a temperature of 80.7°C
Combus enthalpy (J/Kg)	5841329
Specific heat capacity (J/(Kg·K))	1845
Henry's constant (mol/(m³·Pa))	20.26

Behaviour at sea

Persistence (days)	1.6
Log kow	0.8
Log koc	0.77
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	3100
Bioconcentration factor (BCF)	3

Additional data

Colour	incolore	
Odour	odeur douce	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FED	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	14
State	liquide
Temperature (°C)	< 5°, ambiante
Pressure (Pa)	ambiante
Family name	acrylates
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non

Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H331	Toxic if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P311	Call a POISON CENTER or doctor/physician.

TLV-TWA	10
TEEL-1 (mg/m3)	2 ppm
TEEL-2 (mg/m3)	7.5 ppm
TEEL-3 (mg/m3)	150 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	1.1
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.19
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	0 [µg/l] on the short term

ACRYLONITRILE

UN Number: 1093 - CAS Number: 107-13-1

> **Also known as:** ACRYLON, CARBACRYL, CYANOETHYLENE, Acrylonitrile Monomer, 2-Propenenitrile, Propenoic Acid Nitrile, Vinyl Cyanide, Cyanure De Vinyle, Nitrile Acrylique, Acrylonitrile

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1093
CAS number	107-13-1
Formula	C_3H_3N

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	807.5 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.43 [cSt] at a temperature of 20°C 0.42 [cSt] at a temperature of 25°C
Molar mass (g/mol)	53.06
Density of gas (kg/m3)	2.322
Solubility (g/L)	79000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	77
Melting Point (°C)	-82
Critical molar volume (m³/mol)	0.000173
Critical temperature (°C)	540
Critical pressure (Pa)	4660000
Surface tension (mN/m)	27.22 [mN/m] at a temperature of 20°C 26.63 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	11143 [Pa] at a temperature of 20°C 14470 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	480
Flash Point (°C)	-5
Flash Point (Pensky-Martens closed cup) (°C)	-1
Lower explosivity limit (LEL) (volume %)	3
Upper explosivity limit (UEL) (volume %)	17

Vapor enthalpy (J/Kg)	616000 [J/Kg] at a temperature of 77.4°C
Combus enthalpy (J/Kg)	31900000
Specific heat capacity (J/(Kg·K))	2050
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	26
Henry's constant (mol/(m³·Pa))	8.7

Behaviour at sea

Log kow	-0.92
Log koc	-0.07
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore à jaune clair
Odour	odeur irritante

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Cargo group	15
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	allyles substitués
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

Static electricity	Non
Oxidizing agents	Oui
Notable risks	Oxidizer. Polymerization.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	500	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H331	Toxic if inhaled.
	H335	May cause respiratory irritation.
	H350	May cause cancer.
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P231	Handle under inert gas.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P262	Do not get in eyes, on skin, or on clothing.
	P270	Do no eat, drink or smoke when using this product.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	Wear respiratory protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P331	Do NOT induce vomiting.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...
ERPG-1 (ppm)	10	
ERPG-2 (ppm)	35	
ERPG-3 (ppm)	75	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	1.63
Lowest median lethal concentration (LC50) on crustacean (mg/l)	6
Lowest median lethal concentration (LC50) on fishes (mg/l)	5.16
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.8

Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.5
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.17
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	16.3 [µg/l] on the short term 1.7 [µg/l] on the long term

ADIPATE DE DI-(2-ETHYLHEXYL)

CAS Number: 103-23-1

> **Also known as:** ADIPIC ACID, BIS(2-ETHYLHEXYL)ESTER, BIS(2-ETHYLHEXYL)ADIPATE, DI-(2-ETHYLHEXYL)ADIPATE, Adipic Acid, Bis(2-Ethylhexyl) Ester, Bis(2-Ethylhexyl) Hexanedioate, Di(2-Ethylhexyl)Adipate, Di-2-Ethylhexyl Adipate, Dioctyl Adipate, Hexanedioic Acid, Bis(2-Ethylhexyl) Ester, Hexanedioic Acid, Dioctyl Ester, Deha, Adipic Acid, Di-2-Ethylhexyl Ester, Bis(Ethyl-2-Hexyl) Adipate, Doa, Bis(2-Ethylhexyl) Adipate, Adipate De Di-2-Ethylhexyle

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	103-23-1
Formula	$C_{22}H_{42}O_4$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	923 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	14.2 [cSt] at a temperature of 20°C
Molar mass (g/mol)	370.58
Density of gas (kg/m3)	16.51
Solubility (g/L)	1 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	417
Melting Point (°C)	-67.8
Surface tension (mN/m)	30.2 [mN/m] at a temperature of 20°C

Flash Point (°C)	204
Flash Point (Pensky-Martens closed cup) (°C)	196
Combus enthalpy (J/Kg)	33600000
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.02
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	0.04

Behaviour at sea

Log kow	8.1
Log koc	5.78
Biodegradation in estuary environment (Half-life) (days)	1
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	27

Additional data

Colour	clair à couleur paille	
Odour	inodore	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	F/FE/E	

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible

Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	> 1.4
Lowest median lethal concentration (LC50) on crustacean (mg/l)	> 0.23
Lowest median lethal concentration (LC50) on fishes (mg/l)	> 0.78
Highest no observed effect concentration (NOEC) on algae (mg/l)	> 0.78
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.035
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	2.3 [µg/l] on the short term 0.35 [µg/l] on the long term

ADIPATE DE DI-n-HEXYLE

CAS Number: 110-33-8

> **Also known as:** DI-n-HEXYL ADIPATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	110-33-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	939 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	155.07
Boiling Point (°C)	> 200
Melting Point (°C)	-11
Vapour Pressure (Pa)	500 [Pa] at a temperature of 20°C
Flash Point (°C)	163

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'ester
Standard behavior classification	FE/F

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui

Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	5 - Very highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

ADIPATE DE DIISONONYLE

CAS Number: 33703-08-1

Also known as: DIISONONYL ADIPATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	33703-08-1

Physical chemical data

Physical State (20°C)	Liquide
Molar mass (g/mol)	398.63

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ADIPATE DE DIMETHYLE

CAS Number: 627-93-0

> **Also known as:** ADIPIC ACID, DIMETHYL ESTER, DIMETHYL ADIPATE, DIMETHYLHEXANEDIOATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	627-93-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1063 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	174.2
Density of gas (kg/m3)	7.74
Boiling Point (°C)	109/110
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	360
Flash Point (°C)	107
Lower explosivity limit (LEL) (volume %)	0.81
Upper explosivity limit (UEL) (volume %)	8.1

Behaviour at sea

Additional data

Colour	incolore
Odour	douce

Transportation data

Cargo group	34
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ADIPATE DE DIOCTYLE

> **Also known as:** ADIPIC ACID BIS (2-ETHYL HEXYL ESTER), ADIPOL 2EH, BEHA, BIS (2-ETHYL HEXYL ADIPATE), DI-(2-ETHYL-HEXYL ADIPATE), DIOCTYL ADIPATE, DIOCTYL ADIPATE, DOA, EFFEMOLL DOA, ERGOPLAST AD DOA

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	928 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	371
Boiling Point (°C)	417
Melting Point (°C)	-67.8
Vapour Pressure (Pa)	347 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	340
Flash Point (°C)	196
Lower explosivity limit (LEL) (volume %)	0.3
Upper explosivity limit (UEL) (volume %)	2.8

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	D, FED, FE

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	150
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

ADIPONITRILE

UN Number: 2205 - CAS Number: 111-69-3

> **Also known as:** ADIPIC ACID, ADIPIC ACID DINITRILE, 1,4-CYANOBUTANE, 1,4-DICYANOBUTANE, DINITRILE, Hexanedinitrile, Hexanedioic Acid Nitrile, Adipynitrile, Tetramethylenedicyanide, Adiponitrile

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2205
CAS number	111-69-3
Formula	$C_6H_8N_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	961.1 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	9.4 [cSt] at a temperature of 20°C
Molar mass (g/mol)	108
Density of gas (kg/m3)	4.77
Solubility (g/L)	83000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	290
Melting Point (°C)	1
Critical temperature (°C)	507
Critical pressure (Pa)	2800000
Surface tension (mN/m)	45.45 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C 0.33 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	460
Flash Point (°C)	93
Flash Point (Cleveland open cup) (°C)	93
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	4.9
Vapor enthalpy (J/Kg)	703382 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	40400000
Specific heat capacity (J/(Kg·K))	1190

Henry's constant (mol/(m³·Pa))	0.00012

Behaviour at sea

Persistence (days)	1.6
Log kow	-0.32
Log koc	1.3
Bioconcentration factor (BCF)	3

Additional data

Colour	incolore à jaune clair	
Odour	inodore	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FD	

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	37
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	nitriles
IMO class	6.1

Reactivity data

Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high

Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Health**	
	H301	Toxic if swallowed.
	H332	Harmful if inhaled.
Precautionary statements	**Prevention**	
	P233	Keep container tightly closed.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P330	Rinse mouth.
	Storage	
	P403	Store in a well-ventilated place.
TLV-TWA	50	
TEEL-1 (mg/m3)	3.85	
TEEL-2 (mg/m3)	3.85	
TEEL-3 (mg/m3)	150	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	> 100
Lowest median lethal concentration (LC50) on crustacean (mg/l)	445
Lowest median lethal concentration (LC50) on fishes (mg/l)	384
Highest no observed effect concentration (NOEC) on algae (mg/l)	> 100
Highest no observed effect concentration (NOEC) on fishes (mg/l)	720
Assessment factor (AF)	1000 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	384 [µg/l] on the short term

ALACHLORE technique (> 90%)

CAS Number: 15972-60-8

> **Also known as:** ALACHLOR technical (90% or more), 2-CHLORO-2',6'-DIETHYL-N-METHOXYMETHYLACETANILIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	15972-60-8

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1130 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	269.8
Boiling Point (°C)	100 (2.66 Pa)
Melting Point (°C)	38
Vapour Pressure (Pa)	< 10 [Pa] at a temperature of 20°C
Flash Point (°C)	137

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

State	solide

Reactivity data

Metal(s) and alloys	Oui (steel, black iron)

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500

Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ALCOOL ALLYLIQUE

UN Number: 1098 - CAS Number: 107-18-6

Also known as: ALLYL ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1098
CAS number	107-18-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	852 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	58.08
Density of gas (kg/m3)	2.58
Boiling Point (°C)	97.1
Melting Point (°C)	-129
Vapour Pressure (Pa)	2400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	375
Flash Point (°C)	21
Lower explosivity limit (LEL) (volume %)	2.5
Upper explosivity limit (UEL) (volume %)	18

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur prononcée de moutarde

Transportation data

Transport mode	Vrac,Colis
Cargo group	15
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	allyles substitués
IMO class	6.1

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	150
TEEL-1 (mg/m3)	2.1
TEEL-2 (mg/m3)	4.2
TEEL-3 (mg/m3)	20

Ecotoxicity

ALCOOL AMYLIQUE primaire

UN Number: 1105

> **Also known as:** AMYL ALCOHOL primary, n-AMYL ALCOHOL, 1-AMYL ALCOHOL, AMYLOL, n-BUTYL CARBINOL, 1-BUTYLCARBINOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1105

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	810 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	88.15
Density of gas (kg/m3)	3.93
Boiling Point (°C)	112/138
Melting Point (°C)	-79
Vapour Pressure (Pa)	407 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	300/400
Flash Point (°C)	-0.276923077
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	10.5

Behaviour at sea

Additional data

Colour	incolore
Odour	douce et légère

Transportation data

Package group	II
Cargo group	20
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	alcools, glycols
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	100 ppm
TEEL-2 (mg/m3)	100 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

ALCOOL AMYLIQUE TERTIAIRE

UN Number: 1105

Also known as: Tert-AMYL ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1105

Physical chemical data

Physical State (20°C)	Liquide
Molar mass (g/mol)	88.14
Boiling Point (°C)	102
Melting Point (°C)	-12
Flash Point (°C)	20

Behaviour at sea

Additional data

Transportation data

Package group	III
Cargo group	20
State	liquide
IMO class	3.3

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	100 ppm
TEEL-2 (mg/m3)	100 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

ALCOOL BENZYLIQUE

UN Number: 1993 - CAS Number: 100-51-6

> **Also known as:** BENZYL ALCOHOL, Tert-Butyl Ethyl Ether, 1,1-Dimethylethyl Ethyl Ether, 2-Ethoxy-2-Methylpropane, Ethyl 1,1-Dimethylethyl Ether, Ethyl Tert-Butyl Oxide, Methyl-2-Ethoxypropane, 2-Methyl-2-Ethoxypropane, Ethyl T-Butyl Ether, Ethyl Tert-Butyl Ether

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1993
CAS number	100-51-6
Formula	$C_6H_{14}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1050 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	108.13
Density of gas (kg/m3)	4.773
Solubility (g/L)	12400 [g/L] at a temperature of 20°C and salinity of 0‰ 13000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	205
Melting Point (°C)	-15
Critical molar volume (m³/mol)	0.000395
Critical temperature (°C)	509.4
Critical pressure (Pa)	2934000
Vapour Pressure (Pa)	13 [Pa] at a temperature of 20°C 20664.97 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	435
Flash Point (°C)	101
Lower explosivity limit (LEL) (volume %)	1.3
Upper explosivity limit (UEL) (volume %)	1.3
Combus enthalpy (J/Kg)	36300000
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.08

Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	165.6

Behaviour at sea

Persistence (days)	1.6
Log kow	1.68
Log koc	2.29
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	11.1

Additional data

Colour	incolore	
Odour	odeur douce et agréable	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	SD	

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H336	May cause drowsiness or dizziness.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P271	Use only outdoors or in a well-ventilated area.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
TEEL-1 (mg/m3)	60	
TEEL-2 (mg/m3)	150	
TEEL-3 (mg/m3)	150	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	1100
Lowest median lethal concentration (LC50) on crustacean (mg/l)	37
Lowest median lethal concentration (LC50) on fishes (mg/l)	41.5
Highest no observed effect concentration (NOEC) on algae (mg/l)	7.5
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	51

Highest no observed effect concentration (NOEC) on fishes (mg/l)	63.9
Assessment factor (AF)	1000 on the short term 10000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	37 [µg/l] on the short term 3.7 [µg/l] on the long term

ALCOOL BUTYLIQUE SECONDAIRE

UN Number: 1120

> **Also known as:** Sec-BUTANOL, 2-BUTANOL, SEC-BUTYL ALCOHOL, BUTYLENE HYDRATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1120

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	810 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	74.12
Density of gas (kg/m3)	3.3
Boiling Point (°C)	99.5
Melting Point (°C)	-115
Vapour Pressure (Pa)	1300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	406
Flash Point (°C)	24
Lower explosivity limit (LEL) (volume %)	1.7

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur d'alcool, agréable

Transportation data

Package group	II
Cargo group	20
State	liquide
Temperature (°C)	ambiante
Family name	alcools, glycols
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	2000
TLV-TWA	100
TEEL-1 (mg/m3)	50 ppm
TEEL-2 (mg/m3)	50 ppm
TEEL-3 (mg/m3)	1400 ppm

Ecotoxicity

ALCOOL BUTYLIQUE TERTIAIRE

UN Number: 1120 - CAS Number: 75-65-0

Also known as: Tert-BUTANOL, TERT-BUTYL ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1120
CAS number	75-65-0
Formula	$C_4H_{10}O$

Physical chemical data

Physical State (20°C)	Liquide/Solide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	5.4647 [cSt] at a temperature of 25°C
Molar mass (g/mol)	74.12
Density of gas (kg/m3)	3.35
Solubility (g/L)	1000000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	83
Melting Point (°C)	25
Critical molar volume (m³/mol)	0.000275
Critical temperature (°C)	506.2
Critical pressure (Pa)	3972000
Vapour Pressure (Pa)	4000 [Pa] at a temperature of 20°C 5600 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	470
Flash Point (°C)	10
Flash Point (Pensky-Martens closed cup) (°C)	11
Lower explosivity limit (LEL) (volume %)	2.3
Upper explosivity limit (UEL) (volume %)	8
Vapor enthalpy (J/Kg)	527111 [J/Kg] at a temperature of 82.4°C 629916 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2949
Henry's constant (mol/(m³·Pa))	0.92

Behaviour at sea

Log kow	0.37
Log koc	0.32
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	5

Additional data

Colour	cristaux blancs à l'état solid
Odour	forte odeur d'alcool

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	II
Cargo group	20
Temperature (°C)	ambiante
Family name	alcools, glycols
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating

Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1600
TLV-TWA	100
TEEL-1 (mg/m3)	150 ppm
TEEL-2 (mg/m3)	1600 ppm
TEEL-3 (mg/m3)	1600 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	3550
Highest no observed effect concentration (NOEC) on algae (mg/l)	976
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	100
Highest no observed effect concentration (NOEC) on fishes (mg/l)	332
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	200 [µg/l] on the short term

ALCOOL DECYLIQUE

> **Also known as:** ANTAK (T), CAPRIC ALCOHOL, CAPRINIC ALCOHOL, DECANOL, DECAN-1-OL, n-DECANOL, DECATYL ALCOHOL, n-DECYLALCOHOL, DECYL ALCOHOL, DECYLIC ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	840 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	158.29
Density of gas (kg/m3)	6.31
Boiling Point (°C)	230
Vapour Pressure (Pa)	133 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	285
Flash Point (°C)	82

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	légère odeur d'alcool

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Interference with coastal amenities (E2)	Fp - Persistent slick forming substance

Human toxicity threshold

Ecotoxicity

ALCOOL ISOAMYLIQUE

UN Number: 1105 - CAS Number: 123-51-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1105
CAS number	123-51-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	810 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	88.15
Density of gas (kg/m3)	3.87
Boiling Point (°C)	132
Melting Point (°C)	-117
Vapour Pressure (Pa)	300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	340
Flash Point (°C)	43
Lower explosivity limit (LEL) (volume %)	1.2

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'alcool
Standard behavior classification	FED

Transportation data

Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	3.3

Reactivity data

Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	10000
TLV-TWA	100
TEEL-1 (mg/m3)	125 ppm
TEEL-2 (mg/m3)	125 ppm
TEEL-3 (mg/m3)	500 ppm

Ecotoxicity

ALCOOL METHYLAMYLIQUE

UN Number: 2053 - CAS Number: 108-11-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2053
CAS number	108-11-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	810 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.18
Density of gas (kg/m3)	4.515
Boiling Point (°C)	132
Melting Point (°C)	< -90
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	312
Flash Point (°C)	41
Upper explosivity limit (UEL) (volume %)	5.5

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'alcool
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	alcools, glycols
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	400
TLV-TWA	25

Ecotoxicity

Alcool Tert-Butylique

UN Number: 1120 - CAS Number: 75-65-0

> **Also known as:** Tert-Butanol, 2-Methyl-2-Propanol, 2-Methylpropan-2-Ol, Trimethylcarbinol, Tert-Butyl Alcohol, Alcool Tert-Butylique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1120
CAS number	75-65-0
Formula	$C_4H_{10}O$

Physical chemical data

Physical State (25°C)	Solid
Kinematic viscosity (cSt)	5.4647 [cSt] at a temperature of 25°C
Molar mass (g/mol)	74.121
Solubility (g/L)	1000000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	82.4
Melting Point (°C)	25.69
Critical molar volume (m³/mol)	0.000275
Critical temperature (°C)	506.2
Critical pressure (Pa)	3972000
Flash Point (Pensky-Martens closed cup) (°C)	11
Lower explosivity limit (LEL) (volume %)	2.4
Upper explosivity limit (UEL) (volume %)	8
Vapor enthalpy (J/Kg)	527111 [J/Kg] at a temperature of 82.4°C 629916 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2949
Henry's constant (mol/(m³·Pa))	0.92

Behaviour at sea

Log kow	0.37
Log koc	0.32
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable

Bioconcentration factor (BCF)	5

Additional data

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

Abilities	Miscible in water.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P403 + P235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	3550
Highest no observed effect concentration (NOEC) on algae (mg/l)	976
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	100
Highest no observed effect concentration (NOEC) on fishes (mg/l)	332
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	200 [µg/l] on the short term

ALDEHYDE GLUTARIQUE en solution

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1093 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	100.1
Density of gas (kg/m3)	4.515
Boiling Point (°C)	187
Melting Point (°C)	-14
Vapour Pressure (Pa)	2300 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	jaune clair
Odour	odeur de pomme pourrie

Transportation data

Cargo group	19
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	aldéhydes

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.2
ERPG-1 (ppm)	0.2

Ecotoxicity

ALDEHYDE ISODECALIQUE

UN Number: 3082

> **Also known as:** 2,6-DIMETHYL OCTANAL, 2,6-DIMETHYL OCTANOIC ALDEHYDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	840 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	156.28
Density of gas (kg/m3)	5.65
Vapour Pressure (Pa)	29 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur fruitée

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicitv

ALDEHYDE PROPIONIQUE

UN Number: 1275

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1275

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	805 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	58.08
Density of gas (kg/m3)	2.59
Boiling Point (°C)	48
Melting Point (°C)	-81
Vapour Pressure (Pa)	30000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	207
Flash Point (°C)	-20
Lower explosivity limit (LEL) (volume %)	2.9
Upper explosivity limit (UEL) (volume %)	17

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur choquante et désagréable
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	19
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	aldéhydes
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	45 ppm
TEEL-2 (mg/m3)	260 ppm
TEEL-3 (mg/m3)	840 ppm

Ecotoxicity

ALDEHYDES OCTYLIQUES

UN Number: 1191

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1191

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	825 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	128.22
Boiling Point (°C)	163
Melting Point (°C)	-85
Vapour Pressure (Pa)	200000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	180
Flash Point (°C)	52
Lower explosivity limit (LEL) (volume %)	0.85
Upper explosivity limit (UEL) (volume %)	7.2

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur fruitée

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	19
Temperature (°C)	ambiante
Family name	aldéhydes
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	60
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

ALDRINE solide

UN Number: 2761

> **Also known as:** ALDREX, ALDRIN solid, ALDRINE, ALDRITE, ALDROSOL, ALTOX, DRINOX

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2761

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1600 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	364.93
Melting Point (°C)	95
Vapour Pressure (Pa)	0.009 [Pa] at a temperature of 20°C
Flash Point (°C)	65

Behaviour at sea

Additional data

Colour	brun clair à brun foncé
Odour	douce odeur de médicaments
Marine pollutant	P

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	solide
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.015
TEEL-1 (mg/m3)	0.25
TEEL-2 (mg/m3)	10
TEEL-3 (mg/m3)	25

Ecotoxicity

ALKARYL POLYETHERS (C9-C20)

Also known as: ALKARYL POLYETHER (C9-C20)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	230/290
Melting Point (°C)	11.11111111
Vapour Pressure (Pa)	< 10000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	260/370
Flash Point (°C)	150

Behaviour at sea

Additional data

Colour	jaune-brun
Odour	odeur de lubrifiant
Standard behavior classification	S/SD

Transportation data

Cargo group	33
State	liquide
Family name	sol. aqueuses diverses

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ALKARYLDITHIOPHOSPHATES (C7-C16) DE ZINC

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000 [Kg/m³] at a temperature of 20°C
Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C
Flash Point (°C)	150/210

Behaviour at sea

Additional data

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ALKYLAMINES A LONGUES CHAINES SULFOHYDROCARBONEES mélanges (C18+)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000/1100 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	> 100
Melting Point (°C)	< 0
Vapour Pressure (Pa)	< 1300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	260/370
Flash Point (°C)	80

Behaviour at sea

Additional data

Colour	jaune-brun
Odour	odeur de lubrifiant

Transportation data

Cargo group	33
State	liquide
Family name	mélange d'hydrocarbures

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ALKYLATES D'AVIATION paraffines & isoparaffines en C8, Teb 95 °C

Also known as: AVIATION ALKYLATES (C8 paraffins & isoparaffins, BPt 95-120 °C)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	114
Boiling Point (°C)	95/120
Melting Point (°C)	1.833333333
Flash Point (°C)	-0.923076923

Behaviour at sea

Additional data

Standard behavior classification	F/FE/E

Transportation data

Cargo group	33
Family name	mélange d'hydrocarbures

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ALKYLDITHIOPHOSPHATES (C3-C14) DE ZINC

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000/1100 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	> 100
Melting Point (°C)	< 0
Vapour Pressure (Pa)	< 100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	260/370
Flash Point (°C)	150

Behaviour at sea

Additional data

Colour	jaune-brun
Odour	odeur de lubrifiant

Transportation data

Cargo group	34
State	liquide

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

alpha-CHLOROPROPYLENE

UN Number: 1100 - CAS Number: 107-05-1

> **Also known as:** ALLYL CHLORIDE, CHLORALLYLENE, 3-CHLOROPROPENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1100
CAS number	107-05-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	938 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	76.53
Density of gas (kg/m3)	3.354
Boiling Point (°C)	45
Melting Point (°C)	-136
Vapour Pressure (Pa)	40014 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	390
Flash Point (°C)	-30
Lower explosivity limit (LEL) (volume %)	3.3
Upper explosivity limit (UEL) (volume %)	11.9

Behaviour at sea

Additional data

Colour	incolore à jaune-brun
Odour	odeur prononcée et irritante

Transportation data

Transport mode	Vrac,Colis
Cargo group	15
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	allyles substitués
IMO class	3.1

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	300
ERPG-2 (ppm)	40
ERPG-3 (ppm)	300

Ecotoxicity

alpha-PINENE

UN Number: 2368

Also known as: ACINTENE A

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2368

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	860 [Kg/m³] at a temperature of 20°C
Density of gas (kg/m3)	6.089
Vapour Pressure (Pa)	665 [Pa] at a temperature of 20°C
Flash Point (°C)	33

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore
Odour	Essence de térébenthine
Standard behavior classification	D, FE, FED

Transportation data

Package group	III
State	liquide
IMO class	3.3

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate

Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	Ss - Skin Sensitization
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	0.0005
TEEL-2 (mg/m3)	0.0035
TEEL-3 (mg/m3)	0.015

Ecotoxicity

ALUMINATE DE SODIUM en solution

UN Number: 1819 - CAS Number: 11138-49-1

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1819
CAS number	11138-49-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1550 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	81.97
Boiling Point (°C)	115
Melting Point (°C)	1650

Behaviour at sea

Additional data

Colour	incolore à ambré
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	II/III
State	liquide
Temperature (°C)	ambiante
Family name	caustiques

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Al, Cu, Sn, Zn)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	8.75
TEEL-2 (mg/m3)	8.75
TEEL-3 (mg/m3)	8.75

Ecotoxicity

AMINOETHYLETHANOLAMINE

CAS Number: 111-41-1

> **Also known as:** N-AMONOETHYLETHANOLAMINE, ETHANOL, 2-((2-AMINOETHYL)AMINO)-

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	111-41-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1028 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	104.15
Density of gas (kg/m3)	4.644
Boiling Point (°C)	243
Ignition Temperature (°C)	368
Flash Point (°C)	135
Lower explosivity limit (LEL) (volume %)	15
Upper explosivity limit (UEL) (volume %)	27

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur d'ammoniaque

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alkanolamines

Reactivity data

Acid(s)	Oui

Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3B - Corrosive
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	35
TEEL-2 (mg/m3)	250
TEEL-3 (mg/m3)	500

Ecotoxicity

AMMONIAC anhydre

UN Number: 1005 - CAS Number: 7664-41-7

Also known as: AMMONIA anhydrous, Ammonia Gas, Ammonia Anhydrous, Ammoniac

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1005
CAS number	7664-41-7
Formula	NH_3

Physical chemical data

Physical State (20°C)	Gaz
Physical State (25°C)	Gas
Density (kg/m3)	0.75 [Kg/m³] at a temperature of 20°C 681.8 [Kg/m³] at a temperature of -33.33°C
Kinematic viscosity (cSt)	0.255 [cSt] at a temperature of -33.5°C
Molar mass (g/mol)	17.03
Density of gas (kg/m3)	0.75
Solubility (g/L)	531000 [g/L] at a temperature of 20°C and salinity of 0‰ 440000 [g/L] at a temperature of 28°C and salinity of 0‰
Boiling Point (°C)	-33.2
Melting Point (°C)	-78
Critical molar volume (m³/mol)	6.98e-05
Critical temperature (°C)	405.56
Critical pressure (Pa)	1135700
Vapour Pressure (Pa)	861050 [Pa] at a temperature of 20°C 1013250 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	630
Flash Point (Pensky-Martens closed cup) (°C)	132
Lower explosivity limit (LEL) (volume %)	16
Upper explosivity limit (UEL) (volume %)	25
Vapor enthalpy (J/Kg)	1228334 [J/Kg] at a temperature of -33.33°C
Combus enthalpy (J/Kg)	22476660
Henry's constant (mol/(m³·Pa))	1.63

Behaviour at sea

Log kow	0.23
Log koc	1.155
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable

Additional data

Colour	incolore	
Odour	odeur d'ammoniaque	
MARPOL pollution category	**Category**	**Description**
	Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.
Standard behavior classification	GD	

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	ammoniac
IMO class	2(2.3)

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	500	
Hazard statements	**Physical**	
	H221	Flammable gas.
	H280	Contains gas under pressure, may explode if heated.
	Health	
	H314	Causes severe skin burns and eye damage.
	H331	Toxic if inhaled.
	Environmental	
	H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

TLV-TWA	25				
ERPG-1 (ppm)	25				
ERPG-2 (ppm)	150				
ERPG-3 (ppm)	750				
	10 min	**30 min**	**60 min**	**4 hrs**	**8 hrs**
AEGL-1 (ppm)	30	30	30	30	30
AEGL-2 (ppm)	220	220	160	110	110
AEGL-3 (ppm)	2700	1600	1100	550	390

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	17
Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.13
Lowest median lethal concentration (LC50) on fishes (mg/l)	0.5
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.79
Assessment factor (AF)	20 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	1 [µg/l] on the short term

AMMONIAQUE solution aqueuse (< 28%)

UN Number: 2672 - CAS Number: 7664-41-7

> **Also known as:** AMMONIA aqueous solution (28% or less), AMMONIA LIQUOR, AMMONIA WATER, AMMONIUM HYDROXIDE, AQUA AMMONIA, Ammonia Aqueous, Ammonia Solution, Ammonia Monohydrate, Ammonium Monohydrate, Aqueous Ammonia, Ammonium Hydroxide ((Nh4)(Oh)), Ammonia, Aqueous Solution, Ammoniac Water, Ammonium Hydroxide (25%), Ammoniaque (25%)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2672
CAS number	7664-41-7
Formula	NH_5O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	35.05
Density of gas (kg/m3)	0.77
Solubility (g/L)	305000 [g/L] at a temperature of 20°C and salinity of 0‰ 280000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	36
Melting Point (°C)	-97
Surface tension (mN/m)	23.4 [mN/m] at a temperature of 20°C 18.1 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	30000 [Pa] at a temperature of 20°C 47400 [Pa] at a temperature of 21.1°C
Ignition Temperature (°C)	> 600
Lower explosivity limit (LEL) (volume %)	16
Upper explosivity limit (UEL) (volume %)	25

Behaviour at sea

Log kow	-0.17
Log koc	1.16

Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10

Additional data

Colour	incolore	
Odour	inodore	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	DE	

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Family name	ammoniac

Reactivity data

Water	Non
Abilities	Solution.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui
Notable risks	Reacts with oxides and peroxides.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight

Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	300	
Hazard statements	**Health**	
	H314	Causes severe skin burns and eye damage.
	H335	May cause respiratory irritation.
	Environmental	
	H400	Very toxic to aquatic life.
Precautionary statements	**Prevention**	
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P391	Collect spillage.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	25	
TEEL-1 (mg/m3)	6 ppm	
TEEL-2 (mg/m3)	40 ppm	
TEEL-3 (mg/m3)	100 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	1300
Lowest median lethal concentration (LC50) on crustacean (mg/l)	9
Lowest median lethal concentration (LC50) on fishes (mg/l)	2.4
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.234
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	2

Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.06
Assessment factor (AF)	1000 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	2.4 [µg/l] on the short term 0.6 [µg/l] on the long term

ANHYDRIDE ACETIQUE

UN Number: 1715 - CAS Number: 108-24-7

> **Also known as:** ACETIC ACID ANHYDRIDE, ACETIC ANHYDRIDE, ACETIC OXIDE, ACETYL, ACETYL ANHYDRIDE, ACETYL ETHER, ACETYL OXIDE, AZINZUUR ANHYDRIDE, ESSIGSÄURE ANHYDRID, ETHANOIC ANHYDRIDE, Acetanhydride, Ethanoic Anhydrate, Ethanoic Acid Anhydride, Anhydride Acetique, Anhydryde Acetique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1715
CAS number	108-24-7
Formula	$C_4H_6O_3$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1080 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.84 [cSt] at a temperature of 20°C 0.78 [cSt] at a temperature of 25°C
Molar mass (g/mol)	102.09
Density of gas (kg/m3)	4.541
Solubility (g/L)	113500 [g/L] at a temperature of 20°C and salinity of 0‰ 262000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	139
Melting Point (°C)	-73
Critical temperature (°C)	606
Critical pressure (Pa)	4000000
Surface tension (mN/m)	32.7 [mN/m] at a temperature of 20°C 31.93 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	533 [Pa] at a temperature of 20°C 680 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	330
Flash Point (°C)	49
Flash Point (Pensky-Martens closed cup) (°C)	49
Flash Point (Cleveland open cup) (°C)	54

Lower explosivity limit (LEL) (volume %)	2.7
Upper explosivity limit (UEL) (volume %)	10
Combus enthalpy (J/Kg)	16400000
Specific heat capacity (J/(Kg·K))	1648
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.03
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	0.57

Behaviour at sea

Log kow	-0.58
Log koc	1.11
Biodegradation in estuary environment (Half-life) (days)	1
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore
Odour	forte odeur de vinaigre

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	11
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	anhydrides organiques

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui

Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
	H332	Harmful if inhaled.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P235	Keep cool.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	P270	Do no eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P284	Wear respiratory protection.
	Response	
	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P303	IF ON SKIN (or hair):
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P320	Specific treatment is urgent (see ... on this label).
	P330	Rinse mouth.
	P370	In case of fire:
	P378	Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

ERPG-1 (ppm)	0.5
ERPG-2 (ppm)	15

ERPG-3 (ppm)	100

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	9
Lowest median lethal concentration (LC50) on crustacean (mg/l)	55
Lowest median lethal concentration (LC50) on fishes (mg/l)	265
Highest no observed effect concentration (NOEC) on algae (mg/l)	9
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	31.4
Highest no observed effect concentration (NOEC) on fishes (mg/l)	34.3
Assessment factor (AF)	1000 on the short term 1000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	9 [µg/l] on the short term 9 [µg/l] on the long term

ANHYDRIDE MALEIQUE fondu

UN Number: 2215 - CAS Number: 108-31-6

> **Also known as:** cis-BUTENEDIOIC ANHYDRIDE, Butenedioic Anhydride, 2,5-Furandione, Toxilic Anhydride, Maleic Anhydride

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2215
CAS number	108-31-6
Formula	$C_4H_2O_3$

Physical chemical data

Physical State (20°C)	Solide
Physical State (25°C)	Solid
Density (kg/m3)	134 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.06
Density of gas (kg/m3)	4.36
Solubility (g/L)	4912 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	200
Melting Point (°C)	53
Critical temperature (°C)	721
Critical pressure (Pa)	7280000
Ignition Temperature (°C)	475
Flash Point (°C)	103
Flash Point (Pensky-Martens closed cup) (°C)	102
Flash Point (Cleveland open cup) (°C)	110
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	7.1
Henry's constant (mol/(m³·Pa))	0.398

Behaviour at sea

Persistence (days)	1.6
Log kow	1.62
Log koc	0

Biodegradation in estuary environment (Half-life) (days)	0.00208
Bioconcentration factor (BCF)	5

Additional data

Colour	incolore
Odour	odeur choquante

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	D, FD, F

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate

Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
	H317	May cause an allergic skin reaction.
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary statements	**Prevention**	
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	Wear respiratory protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
TLV-TWA	0.25	
ERPG-1 (ppm)	0.2	
ERPG-3 (ppm)	20	

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	230
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	17.5
Highest no observed effect concentration (NOEC) on fishes (mg/l)	150
Assessment factor (AF)	1000 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	10 [µg/l] on the short term

ANHYDRIDE PHTALIQUE fondu

UN Number: 2214 - CAS Number: 85-44-9

> **Also known as:** 1,2-BENZENE DICARBOXYLIC ACID ANHYDRIDE, 1,3-DIOXOPHTHALAN, ESEN

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2214
CAS number	85-44-9

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1500 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	148.12
Density of gas (kg/m3)	6.708
Boiling Point (°C)	284.4
Melting Point (°C)	132
Ignition Temperature (°C)	580
Flash Point (°C)	140
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	10.4

Behaviour at sea

Persistence (days)	1.9

Additional data

Colour	incolore à jaune pâle
Odour	odeur choquante

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	11
State	liquide

Temperature (°C)	131° - 160°
Pressure (Pa)	ambiante
Family name	anhydrides organiques

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1600
TEEL-1 (mg/m3)	12
TEEL-2 (mg/m3)	40
TEEL-3 (mg/m3)	60

Ecotoxicity

ANHYDRIDE PROPIONIQUE

UN Number: 2496 - CAS Number: 123-62-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2496
CAS number	123-62-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1010 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.1
Density of gas (kg/m3)	5.805
Boiling Point (°C)	169
Melting Point (°C)	-45
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Flash Point (°C)	74
Lower explosivity limit (LEL) (volume %)	1.48
Upper explosivity limit (UEL) (volume %)	11.9

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore
Odour	odeur prononcée
Standard behavior classification	D, FD

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	11
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	anhydrides organiques

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	30
TEEL-2 (mg/m3)	200
TEEL-3 (mg/m3)	500

Ecotoxicity

ANILINE

UN Number: 1547 - CAS Number: 62-53-3

> **Also known as:** AMINOBENZENE, AMIOPHEN, ANILINE OIL, ANYIRIM (TR), BENZENEAMINE, BENZENE, AMINO-, BENZIDAM, BLUE OIL (TR), CYANOL (TR), Aminophen, Benzenamine, Phenylamine, Aniline

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1547
CAS number	62-53-3
Formula	C_6H_7N

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1022 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	4.26 [cSt] at a temperature of 20°C 3.76 [cSt] at a temperature of 25°C
Molar mass (g/mol)	93.13
Density of gas (kg/m3)	4.128
Solubility (g/L)	35000 [g/L] at a temperature of 20°C and salinity of 0‰ 33000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	184.4
Melting Point (°C)	-6
Critical molar volume (m³/mol)	0.000291
Critical temperature (°C)	705
Critical pressure (Pa)	5630000
Surface tension (mN/m)	42.9 [mN/m] at a temperature of 20°C 42.12 [mN/m] at a temperature of 25°C
Interfacial tension (mN/m)	5.8 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	40 [Pa] at a temperature of 20°C 90 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	530
Flash Point (°C)	76
Flash Point (Pensky-Martens closed cup) (°C)	70

Flash Point (Cleveland open cup) (°C)	75.6
Lower explosivity limit (LEL) (volume %)	1.3
Upper explosivity limit (UEL) (volume %)	11
Vapor enthalpy (J/Kg)	455707 [J/Kg] at a temperature of 184.4°C 599585 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	34800000
Specific heat capacity (J/(Kg·K))	2060.6
Combustion efficiency (%)	75
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	53
Henry's constant (mol/(m³·Pa))	2.04

Behaviour at sea

Persistence (days)	1.6
Log kow	0.9
Log koc	1.84
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	2.6

Additional data

Colour	incolore à jaune-brun	
Odour	odeur légère	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FD	

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	amines aromatiques
IMO class	6.1

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	100	
Hazard statements	**Health**	
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H331	Toxic if inhaled.
	H341	Suspected of causing genetic defects.
	H351	Suspected of causing cancer.
	H372	Causes damage to organs through prolonged or repeated exposure, exposure cause the hazard:
	Environmental	
	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

	10 min	**30 min**	**60 min**	**4 hrs**	**8 hrs**
AEGL-1 (ppm)	48	16			
AEGL-2 (ppm)	72	24	12		1.5
AEGL-3 (ppm)	120	40	20		2.5

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	19
Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.1
Lowest median lethal concentration (LC50) on fishes (mg/l)	10.6
Highest no observed effect concentration (NOEC) on algae (mg/l)	2
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.015
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.39
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1 [µg/l] on the short term 0.15 [µg/l] on the long term

ARGILE

Also known as: ALUMINIUM SILICATEHYDROXIDE, BALL CLAY, BENTONITE, CLAY

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide

Behaviour at sea

Additional data

Transportation data

State	solide

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

Ecotoxicity

ARSENIATE DE CALCIUM

UN Number: 1573

Also known as: CALCIUM ARSENATE, CUCUMBER DUST (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1573

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3620 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	398
Melting Point (°C)	1455

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	D, SD, S

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.0006
TEEL-1 (mg/m3)	1.5
TEEL-2 (mg/m3)	10
TEEL-3 (mg/m3)	13.3

Ecotoxicity

ARSENIATE DE POTASSIUM

UN Number: 1677

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1677

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	180
Melting Point (°C)	288

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.07 (As)
TEEL-1 (mg/m3)	0.072

TEEL-2 (mg/m3)	2.5
TEEL-3 (mg/m3)	12

Ecotoxicity

ARSENIATE DE SODIUM

UN Number: 1685

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1685

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	312
Boiling Point (°C)	180
Melting Point (°C)	130

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.16 (As)
TEEL-1 (mg/m3)	7.5

TEEL-2 (mg/m3)	13.5
TEEL-3 (mg/m3)	13.5

Ecotoxicity

ARSENIATE DE ZINC

UN Number: 1712

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1712

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3309 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	866

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	D, SD, S

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ARSENIATES DE PLOMB

UN Number: 1617

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1617

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	7800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	347.12
Density of gas (kg/m3)	7800
Melting Point (°C)	280

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	D, SD, S

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.01 (Pb)

TEEL-1 (mg/m3)	0.012
TEEL-2 (mg/m3)	0.012
TEEL-3 (mg/m3)	30

Ecotoxicity

ARSENITE DE CUIVRE

UN Number: 1586

Also known as: COPPER ARSENITE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1586

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	277.4
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.9

Additional data

Colour	vert
Odour	inodore
Standard behavior classification	D, SD, S

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.06 (As)

Ecotoxicity

ARSENITE DE SODIUM

UN Number: 1686

> **Also known as:** ARSENIOUS ACID MONOSODIUM SALT, ATLAS A (T), CHEM PELS (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1686

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1870 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	129.9
Melting Point (°C)	615

Behaviour at sea

Additional data

Colour	blanc à gris
Odour	inodore
Standard behavior classification	D, SD, S

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.16 (As)
TEEL-1 (mg/m3)	0.075
TEEL-2 (mg/m3)	0.6
TEEL-3 (mg/m3)	8.67

Ecotoxicity

AZINPHOS-METHYLE

UN Number: 2783

> **Also known as:** AZINPHOS-METHYL, CARFENE, CORTENE (TR), COTNEON, COTNION METHYL (TR), CRYSTHION 2L (TR), DBD

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2783

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1400 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	317
Melting Point (°C)	74
Vapour Pressure (Pa)	<0.001 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	2.7

Additional data

Colour	brun
Marine pollutant	P
Standard behavior classification	D, SD, S

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	1,5
TLV-TWA	0.015
TEEL-1 (mg/m3)	0.6
TEEL-2 (mg/m3)	0.7
TEEL-3 (mg/m3)	10

Ecotoxicity

AZOTE (gaz comprimé)

UN Number: 1066

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1066

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.161 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	28
Density of gas (kg/m3)	1.161
Boiling Point (°C)	-195.4
Melting Point (°C)	-210
Vapour Pressure (Pa)	25000000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Transport mode	Gaz,Colis
Ship type	3G
State	liq.compr.gas
Temperature (°C)	-196°
Pressure (Pa)	ambiante
IMO class	2(2.2)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	65000 ppm
TEEL-2 (mg/m3)	230000 ppm
TEEL-3 (mg/m3)	400000 ppm

Ecotoxicity

AZOTE (liquide réfrigéré)

UN Number: 1977

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1977

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.161 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	28
Density of gas (kg/m3)	1.161
Boiling Point (°C)	-195.4
Melting Point (°C)	-210
Vapour Pressure (Pa)	25000000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Transport mode	Gaz,Colis
Ship type	3G
State	gas liquéfié
Temperature (°C)	< -196°
Pressure (Pa)	ambiante
IMO class	2(2.2)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	65000 ppm
TEEL-2 (mg/m3)	230000 ppm
TEEL-3 (mg/m3)	400000 ppm

Ecotoxicity

BENZALDEHYDE

UN Number: 1990

> **Also known as:** ARTIFICIAL ESSENTIAL OIL OF ALMOND, BENZENE CARBALDEHYDE, BENZENE CARBONAL, BENZOIC ALDEHYDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1990

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1046 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	106.12
Density of gas (kg/m3)	4.773
Boiling Point (°C)	179
Melting Point (°C)	-26
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	190
Flash Point (°C)	64
Lower explosivity limit (LEL) (volume %)	1.4

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore à jaune pâle
Odour	odeur d'amande amère
Standard behavior classification	SD

Transportation data

State	liquide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	4 ppm
TEEL-2 (mg/m3)	4 ppm
TEEL-3 (mg/m3)	150 ppm

Ecotoxicity

BENZENE

UN Number: 1114 - CAS Number: 71-43-2

> **Also known as:** 6-ANNULENE, BENZINE (T), BENZOL, BENZOL (T), BENZOLE (T), BENZOLENE, BICARBURET OF HYDROGEN, CARBON OIL, COAL NAPHTA (T), CYCLOHEXATRIENE (trace 1), CYCLOHEXATRIENE (trace 2), Coal Naphtha, Cyclohexatriene, Phenyl Hydride, (6)Annulene, Benzole, Pyrobenzol, Pyrobenzole, Benzene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1114
CAS number	71-43-2
Formula	C_6H_6

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	879 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.74 [cSt] at a temperature of 20°C 0.69 [cSt] at a temperature of 25°C
Molar mass (g/mol)	78.11
Density of gas (kg/m3)	3.483
Solubility (g/L)	1780 [g/L] at a temperature of 20°C and salinity of 0‰ 1800 [g/L] at a temperature of 25°C and salinity of 0‰ 1360 [g/L] at a temperature of 25°C and salinity of 35‰
Boiling Point (°C)	80.3
Melting Point (°C)	5.5
Critical molar volume (m³/mol)	0.000265
Critical temperature (°C)	562.05
Critical pressure (Pa)	4895000
Surface tension (mN/m)	28.9 [mN/m] at a temperature of 20°C 28.22 [mN/m] at a temperature of 25°C
Interfacial tension (mN/m)	35 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	10130 [Pa] at a temperature of 20°C 12700 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	550

Flash Point (°C)	-11
Flash Point (Pensky-Martens closed cup) (°C)	-11
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	8
Vapor enthalpy (J/Kg)	393292 [J/Kg] at a temperature of 80.1°C 433107 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	40100000
Specific heat capacity (J/(Kg·K))	1745
Combustion efficiency (%)	70
Mass flow rate of the combustion surface (Kg/(m²·s))	0.09
Rad fraction (%)	60
Henry's constant (mol/(m³·Pa))	545

Behaviour at sea

Log kow	2.13
Log koc	1.85
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	11

Additional data

Colour	incolore
Odour	odeur d'essence

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	32
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	hydrocarbures aromatiques
IMO class	3.2

Reactivity data

Acid(s)	Oui
Static electricity	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	3000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H340	May cause genetic defects. Exposure cause the hazard:
	H350	May cause cancer.
	H372	Causes damage to organs through prolonged or repeated exposure, exposure cause the hazard:

Precautionary statements	**Prevention**	
	P202	Do not handle until all safety precautions have been read and understood.
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P331	Do NOT induce vomiting.
ERPG-1 (ppm)	50	
ERPG-2 (ppm)	150	
ERPG-3 (ppm)	1000	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	29
Lowest median lethal concentration (LC50) on crustacean (mg/l)	10
Lowest median lethal concentration (LC50) on fishes (mg/l)	4.9
Highest no observed effect concentration (NOEC) on algae (mg/l)	9.6
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	3
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.8
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	49 [µg/l] on the short term 8 [µg/l] on the long term

Benzene, Derives En Alkyle C10-13

CAS Number: 67774-74-7

> **Also known as:** Benzene, C10-C13 Alkyl Derivs, Undecylbenzene, Benzene, Derives En Alkyle C10-13

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	67774-74-7
Formula	$C_6H_5CnH_{2n+1}$ ($n=_{10}-_{13}$)

Physical chemical data

Physical State (25°C)	Liquid
Molar mass (g/mol)	239
Solubility (g/L)	0 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	298
Melting Point (°C)	-70
Henry's constant (mol/(m³·Pa))	95

Behaviour at sea

Log kow	7.5
Log koc	4.34
Bioconcentration factor (BCF)	35

Additional data

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

Hazard statements	**Health**	
	H304	May be fatal if swallowed and enters airways.
Precautionary statements	**Response**	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P331	Do NOT induce vomiting.
	Storage	
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.01
Lowest median lethal concentration (LC50) on fishes (mg/l)	> 1000
Highest no observed effect concentration (NOEC) on algae (mg/l)	> 1000
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.01

BENZOATE DE SODIUM

CAS Number: 532-32-1

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	532-32-1

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1440 [Kg/m^3] at a temperature of 20°C
Molar mass (g/mol)	144.11
Melting Point (°C)	300
Ignition Temperature (°C)	>500
Flash Point (°C)	>100

Behaviour at sea

Additional data

Colour	blanc

Transportation data

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible

Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

beta-PROPIOLACTONE

CAS Number: 57-57-8

> **Also known as:** BETAPRONE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	57-57-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1148 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	72.1
Density of gas (kg/m3)	3.225
Boiling Point (°C)	155
Melting Point (°C)	-33
Vapour Pressure (Pa)	500 [Pa] at a temperature of 20°C
Flash Point (°C)	74
Lower explosivity limit (LEL) (volume %)	2.9

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur irritante

Transportation data

State	liquide
Temperature (°C)	<16°
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui
Acid(s)	Non

Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	3B - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	0.5
TEEL-1 (mg/m3)	0.509 ppm
TEEL-2 (mg/m3)	5.09 ppm
TEEL-3 (mg/m3)	15 ppm

Ecotoxicity

BIPHENYLES POLYCHLORES

UN Number: 2315

Also known as: AROCHLOR, CHLOPHREN (T), CHLOREXTOL (T), DYKANOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2315

Physical chemical data

Physical State (20°C)	Solide/Liquide
Density (kg/m3)	1300/1800 (liq) [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	very high
Flash Point (°C)	> 141

Behaviour at sea

Additional data

Colour	blanc (S), jaune (L)
Odour	légère
Marine pollutant	P

Transportation data

Package group	II
State	liquide/solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

BISPHENOL A

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	228.28
Density of gas (kg/m3)	1.548
Boiling Point (°C)	250
Melting Point (°C)	153
Vapour Pressure (Pa)	520 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	600
Flash Point (°C)	207

Behaviour at sea

Additional data

Colour	blanc à brun clair
Odour	légère odeur de médicaments
Standard behavior classification	D, SD, S

Transportation data

State	solide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	100
TEEL-3 (mg/m3)	500

Ecotoxicity

BOISSONS ALCOOLISEES

UN Number: 3065

> **Also known as:** ALCOHOLIC BEVERAGES, AQUEOUS ETHANOLIC SOLUTIONS, ETHANOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3065

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	790 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	46.1
Boiling Point (°C)	78
Melting Point (°C)	0.974358974

Behaviour at sea

Additional data

Colour	variable
Odour	odeur alcoolique

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non

Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

BRAI DE GOUDRON DE HOUILLE

UN Number: 1136 - CAS Number: 65996-93-2

Also known as: COAL TAR PITCH

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1136
CAS number	65996-93-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	> 1100 [Kg/m³] at a temperature of 20°C
Density of gas (kg/m3)	> 1.29
Boiling Point (°C)	> 250
Melting Point (°C)	38/50
Vapour Pressure (Pa)	<10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	>500
Flash Point (°C)	>200

Behaviour at sea

Additional data

Colour	noir
Odour	odeur de goudron

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	33
Temperature (°C)	ambiante
Family name	mélange d'hydrocarbures

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

BROMATE DE POTASSIUM

UN Number: 1484

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1484

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3300 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	167
Boiling Point (°C)	370
Melting Point (°C)	350

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Oui

Combustibles	Oui
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.3
TEEL-2 (mg/m3)	60
TEEL-3 (mg/m3)	60

Ecotoxicity

BROMOCHLOROMETHANE

UN Number: 1887 - CAS Number: 74-97-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1887
CAS number	74-97-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1930 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	129.39
Density of gas (kg/m3)	5.93
Boiling Point (°C)	68
Melting Point (°C)	-88
Vapour Pressure (Pa)	15330 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	inodore
Standard behavior classification	SD

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
IMO class	6.1

Reactivity data

Metal(s) and alloys	Oui (Al, Mg, Zn)

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	600 ppm
TEEL-2 (mg/m3)	1000 ppm
TEEL-3 (mg/m3)	2000 ppm

Ecotoxicity

BROMURE D'HYDROGENE

UN Number: 1048

Also known as: ACIDE BROMIDRIQUE ANHYDRE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1048

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2140 (-67°C) [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	80.92
Density of gas (kg/m3)	3.5
Boiling Point (°C)	-66.8
Melting Point (°C)	-87
Vapour Pressure (Pa)	2445000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	irritante
Standard behavior classification	DE

Transportation data

State	gas
Temperature (°C)	ambiante or lower
IMO class	2(2.3)

Reactivity data

Water	Oui
Metal(s) and alloys	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	30
TEEL-1 (mg/m3)	1 ppm
TEEL-2 (mg/m3)	22 ppm
TEEL-3 (mg/m3)	120 ppm

Ecotoxicity

BROMURE DE CYANOGENE

UN Number: 1889

> **Also known as:** BROMINE CYANIDE, BROMOCYAN (T), BROMOCYANIDE, BROMOCYANOGEN, CAMPILIT (T), CYANOBROMIDE, CYANOGEN BROMIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1889

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2000 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	105.93
Density of gas (kg/m3)	4.644
Boiling Point (°C)	62
Melting Point (°C)	52
Vapour Pressure (Pa)	13300 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore
Odour	odeur pénétrante
Standard behavior classification	D, SD, S

Transportation data

State	solide
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	10 (as CN)
TLV-TWA	1.1 (CN)
TEEL-1 (mg/m3)	44
TEEL-2 (mg/m3)	44
TEEL-3 (mg/m3)	44

Ecotoxicity

BROMURE DE METHYLE

UN Number: 1062

Also known as: BROMOMETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1062

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	4.257 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	94.95
Density of gas (kg/m3)	4.257
Boiling Point (°C)	3.8
Melting Point (°C)	-94
Vapour Pressure (Pa)	187000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	538
Flash Point (°C)	194
Lower explosivity limit (LEL) (volume %)	10
Upper explosivity limit (UEL) (volume %)	15

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore à odeur douce

Transportation data

Transport mode	Vrac,Gaz,Colis
Ship type	1G
Cargo group	36
State	gas liquéfié
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés
IMO class	2(2.3)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	2000
ERPG-2 (ppm)	50
ERPG-3 (ppm)	200

Ecotoxicity

BUTADIENES

UN Number: 1010

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1010

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.451 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	54.09
Density of gas (kg/m3)	2.451
Boiling Point (°C)	-4.2
Melting Point (°C)	-109
Vapour Pressure (Pa)	506500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	415
Flash Point (°C)	-85
Upper explosivity limit (UEL) (volume %)	11.5

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	30
State	gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	oléfines
IMO class	2(2.1)

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	20000
TLV-TWA	1000
ERPG-1 (ppm)	10
ERPG-2 (ppm)	200
ERPG-3 (ppm)	5000

Ecotoxicity

BUTANE

UN Number: 1011 - CAS Number: 106-97-8

> **Also known as:** Methylethylmethane, Butane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1011
CAS number	106-97-8
Formula	C_4H_{10}

Physical chemical data

Physical State (20°C)	Gaz
Physical State (25°C)	Gas
Density (kg/m3)	2.709 [Kg/m³] at a temperature of 20°C 573 [Kg/m³] at a temperature of 25°C
Molar mass (g/mol)	58.12
Density of gas (kg/m3)	2.709
Solubility (g/L)	61 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	-1
Melting Point (°C)	-135
Critical temperature (°C)	425.13
Critical pressure (Pa)	3796000
Surface tension (mN/m)	14.7 [mN/m] at a temperature of 0°C
Interfacial tension (mN/m)	65 [mN/m] at a temperature of 22°C and salinity of 0‰
Vapour Pressure (Pa)	202600 [Pa] at a temperature of 20°C 243680 [Pa] at a temperature of 25°C
Vapour pressure at 70% of critical temperature (Pa)	239070
Ignition Temperature (°C)	365
Flash Point (°C)	-60
Flash Point (Pensky-Martens closed cup) (°C)	-60
Lower explosivity limit (LEL) (volume %)	1.9
Upper explosivity limit (UEL) (volume %)	8.5
Vapor enthalpy (J/Kg)	385211 [J/Kg] at a temperature of -0.5°C
Combus enthalpy (J/Kg)	45385000

Henry's constant (mol/(m³·Pa))	96258.75

Behaviour at sea

Log kow	2.89
Log koc	1.6
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	40

Additional data

Colour	incolore
Odour	odeur d'essence

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	31
State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	paraffines
IMO class	2(2.1)

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

Hazard statements	**Physical**	
	H220	Extremely flammable gas.
TEEL-1 (mg/m3)	5500 ppm	
TEEL-2 (mg/m3)	17000 ppm	
TEEL-3 (mg/m3)	53000 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	69.43
Lowest median lethal concentration (LC50) on fishes (mg/l)	49.9

BUTENE

UN Number: 1012

Also known as: BUTYLENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1012

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.451 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	56.1
Density of gas (kg/m3)	2.451
Boiling Point (°C)	-7
Melting Point (°C)	-185
Vapour Pressure (Pa)	253250 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	440
Flash Point (°C)	-12
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	9.3

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur parfumée et d'essence

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	30
State	liq.compr.gas
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	oléfines
IMO class	2(2.1)

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

BUTENE oligomère

Also known as: BUTENE OLIGOMER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	730 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	112.22
Boiling Point (°C)	60/282
Melting Point (°C)	< -50
Flash Point (°C)	> 20

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence
Standard behavior classification	F/FE/E

Transportation data

Cargo group	30
State	liquide
Family name	oléfines

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000

Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

BUTYLAMINE (primaire, secondaire, tertiaire)

UN Number: 1125 - CAS Number: 109-73-9

> **Also known as:** 1-AMINOBUTANE, 1-BUTANAMINE, N-BUTYLAMINE 1-AMINOBUTANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1125
CAS number	109-73-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	741 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	73.14
Density of gas (kg/m3)	3.225
Boiling Point (°C)	77
Melting Point (°C)	-50
Vapour Pressure (Pa)	9100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	312
Flash Point (°C)	-3
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	9.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de poisson, d'ammoniaque

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	amines aliphatiques
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	3000
TEEL-1 (mg/m3)	7.5 ppm
TEEL-2 (mg/m3)	50 ppm
TEEL-3 (mg/m3)	300 ppm

Ecotoxicity

BUTYLBENZENE

UN Number: 2709 - CAS Number: 104-51-8

Also known as: BUTYL BENZENE, 1-BUTYLBENZENE, n-BUTYLBENZENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2709
CAS number	104-51-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	860 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	134.22
Boiling Point (°C)	183
Melting Point (°C)	-88
Vapour Pressure (Pa)	133 (22.7°C) [Pa] at a temperature of 20°C
Ignition Temperature (°C)	412
Flash Point (°C)	59
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	5.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odourless

Transportation data

Transport mode	Vrac.Colis
Package group	III
Cargo group	32
State	liquide
Family name	hydrocarbures aromatiques

IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	20 ppm
TEEL-2 (mg/m3)	150 ppm
TEEL-3 (mg/m3)	750 ppm

Ecotoxicity

BUTYLENEGLYCOL

CAS Number: 110-63-4

> **Also known as:** BUTANEDIOL, BUTYLENE GLYCOL, 1,3 BUTYLENEGLYCOL, DIHYDROXYBUTANE, 1,4-Butanediol, Butane-1,4-Diol, 1,4-Butylene Glycol, Tetramethylene Glycol, 1,4-Dihydroxybutane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	110-63-4
Formula	$C_4H_{10}O_2$

Physical chemical data

Physical State (20°C)	Liquide/Solide
Physical State (25°C)	Liquid
Density (kg/m3)	1010 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	87.74 [cSt] at a temperature of 20°C 70.3 [cSt] at a temperature of 25°C
Molar mass (g/mol)	89.6
Density of gas (kg/m3)	40
Solubility (g/L)	100000 [g/L] at a temperature of 20°C and salinity of 0‰ 100000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	207.5
Melting Point (°C)	< 23
Critical molar volume (m³/mol)	0.000305
Critical temperature (°C)	692.4
Critical pressure (Pa)	5180000
Surface tension (mN/m)	44.6 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C 1.9 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	377
Flash Point (°C)	121
Flash Point (Pensky-Martens closed cup) (°C)	132
Flash Point (Cleveland open cup) (°C)	121
Lower explosivity limit (LEL) (volume %)	1.9

Vapor enthalpy (J/Kg)	585000 [J/Kg] at a temperature of 235°C 826222 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	27607328
Specific heat capacity (J/(Kg·K))	2521
Henry's constant (mol/(m³·Pa))	0.00013

Behaviour at sea

Log kow	0.5
Log koc	0
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable

Additional data

Colour	incolore
Odour	inodore

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Cargo group	20
Temperature (°C)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H336	May cause drowsiness or dizziness.
Precautionary statements	**Prevention**	
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	P270	Do no eat, drink or smoke when using this product.
	Response	
	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P330	Rinse mouth.
	Disposal	
	P501	Dispose of contents/container to ...
TEEL-1 (mg/m3)	3.5	
TEEL-2 (mg/m3)	25	
TEEL-3 (mg/m3)	250	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	> 1000
Lowest median lethal concentration (LC50) on crustacean (mg/l)	> 85
Lowest median lethal concentration (LC50) on fishes (mg/l)	> 100
Highest no observed effect concentration (NOEC) on algae (mg/l)	> 1000
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	> 85
Assessment factor (AF)	10000 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	80 [µg/l] on the short term

BUTYNE-2 DIOL-1,4

UN Number: 2716

Also known as: 1,4-BUTYNEDIOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2716

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	86.09
Density of gas (kg/m3)	2.83
Melting Point (°C)	58
Vapour Pressure (Pa)	0.2 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	335
Flash Point (°C)	152

Behaviour at sea

Additional data

Colour	blanc à jaune clair

Transportation data

Package group	III
State	solide
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-2 (mg/m3)	20
TEEL-3 (mg/m3)	30

Ecotoxicity

BUTYRALDEHYDE

UN Number: 1129 - CAS Number: 123-72-8

> **Also known as:** BUTAL, BUTALDEHYDE, BUTANAL, BUTYL ALDEHYDE, BUTYRAL, 2-Butanone, 3-Butanone, Butanone, Ethyl Methyl Ketone, Mek, Methyl Acetone, Methyl-2-Propanone, Methylethyl Ketone, Methylethylketone, Butan-2-One, Methyl Ethyl Ketone

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1129
CAS number	123-72-8
Formula	C_4H_8O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	803 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.51 [cSt] at a temperature of 20°C 0.5 [cSt] at a temperature of 25°C
Molar mass (g/mol)	72.11
Density of gas (kg/m3)	3.225
Solubility (g/L)	263000 [g/L] at a temperature of 20°C and salinity of 0‰ 136000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	75
Melting Point (°C)	-97
Critical molar volume (m³/mol)	0.000267
Critical temperature (°C)	536.7
Critical pressure (Pa)	4207000
Surface tension (mN/m)	24.6 [mN/m] at a temperature of 20°C 23.97 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	12300 [Pa] at a temperature of 20°C 12079 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	230
Flash Point (°C)	-6
Flash Point (Pensky-Martens closed cup) (°C)	-2

Flash Point (Cleveland open cup) (°C)	1
Lower explosivity limit (LEL) (volume %)	2.47
Upper explosivity limit (UEL) (volume %)	10.6
Vapor enthalpy (J/Kg)	434059 [J/Kg] at a temperature of 79.6°C 482457 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	32700000
Specific heat capacity (J/(Kg·K))	2200.8
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.07
Rad fraction (%)	28
Henry's constant (mol/(m³·Pa))	5.83

Behaviour at sea

Log kow	0.29
Log koc	0.55
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	0.98

Additional data

Colour	incolore	
Odour	odeur âcre	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	DE	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	19
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	aldéhydes
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	300	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.

Precautionary statements	**General**	
	P102	Keep out of reach of children.
	Prevention	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

TEEL-1 (mg/m3)	0.06 ppm
TEEL-2 (mg/m3)	0.4 ppm
TEEL-3 (mg/m3)	12.5 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	1382
Lowest median lethal concentration (LC50) on fishes (mg/l)	1656

Highest no observed effect concentration (NOEC) on fishes (mg/l)	1170
Assessment factor (AF)	1 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	55.8 [µg/l] on the short term

BUTYRATE D'ETHYLE

UN Number: 1180 - CAS Number: 105-54-4

Also known as: BUTYRIC ACID ETHYL ESTER, BUTYRIC ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1180
CAS number	105-54-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	879 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.16
Density of gas (kg/m3)	5.16
Boiling Point (°C)	121
Melting Point (°C)	-93
Vapour Pressure (Pa)	1868 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	463
Flash Point (°C)	24

Behaviour at sea

Additional data

Colour	incolore
Odour	fruitée
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Temperature (°C)	ambiante

Family name	esters
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

BUTYRATE DE BUTYLE

UN Number: 3272 - CAS Number: 109-21-7

> **Also known as:** BUTANOIC ACID, BUTYL ESTER, BUTYLBUTANOATE, BUTYL BUTYRATE, BUTYRIC ACID, BUTYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3272
CAS number	109-21-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	872 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	144.21
Density of gas (kg/m3)	6.41
Boiling Point (°C)	166.6
Melting Point (°C)	-91.5
Flash Point (°C)	53.3

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de pomme
Standard behavior classification	F/FE/E

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	5 ppm
TEEL-2 (mg/m3)	35 ppm
TEEL-3 (mg/m3)	150 ppm

Ecotoxicity

BUTYRATE DE METHYLE

UN Number: 1237 - CAS Number: 623-42-7

> **Also known as:** BUTANOIC ACID, METHYL ESTER, BUTYRIC ACID, METHYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1237
CAS number	623-42-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	898 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.13
Density of gas (kg/m3)	4.55
Boiling Point (°C)	102.3
Melting Point (°C)	-84.8
Vapour Pressure (Pa)	2455 [Pa] at a temperature of 20°C
Flash Point (°C)	14
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	3.5

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	34
State	liquide

Family name	esters
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

BUTYROLACTONE

Also known as: BUTYRIC ACID LACTONE, gamma-BUTYROLACTONE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1050/1130 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	86.1
Boiling Point (°C)	204/206
Melting Point (°C)	-44
Vapour Pressure (Pa)	150 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	455
Flash Point (°C)	98
Lower explosivity limit (LEL) (volume %)	0.3
Upper explosivity limit (UEL) (volume %)	16

Behaviour at sea

Additional data

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible

Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	C - Carcinogenicity
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-2 (mg/m3)	40
TEEL-3 (mg/m3)	500

Ecotoxicity

CACODYLATE DE SODIUM

UN Number: 1688

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1688

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	160

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	II
State	solide, solut.
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non

Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	3.2
TEEL-2 (mg/m3)	40
TEEL-3 (mg/m3)	500

Ecotoxicity

CAPROLACTAME liquide

CAS Number: 105-60-2

> **Also known as:** AMINOCAPROIC LACTAM, 6-AMINOHEXANOIC ACID LACTAM, CAPROLACTAM liquid

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	105-60-2

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1020 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	113
Density of gas (kg/m3)	5.031
Boiling Point (°C)	268
Melting Point (°C)	69
Vapour Pressure (Pa)	373 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	375
Flash Point (°C)	110
Lower explosivity limit (LEL) (volume %)	1.84

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	FD

Transportation data

Cargo group	22
State	liquide
Temperature (°C)	75° - 24°
Pressure (Pa)	pressurisé
Family name	solutions de caprolactame

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-3 (mg/m3)	20

Ecotoxicity

CARBARYL

UN Number: 2757

Also known as: ARYLAM, CARBATOX, CARPOLIN AND OTHERS

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2757

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	201
Melting Point (°C)	142
Vapour Pressure (Pa)	negligible [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	3.1

Additional data

Colour	blanc à gris
Odour	odeur légère

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	solide
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	70
TLV-TWA	0.6
TEEL-2 (mg/m3)	15
TEEL-3 (mg/m3)	100

Ecotoxicity

CARBONATE D'ETHYLE

UN Number: 2366

Also known as: CARBONIC ACID, DIETHYL ESTER, DIATOL (T), DIETHYL CARBONATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2366

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	975 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	118.13
Density of gas (kg/m3)	5.289
Boiling Point (°C)	127
Melting Point (°C)	-43
Vapour Pressure (Pa)	1330 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	445
Flash Point (°C)	25
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	11

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore
Odour	odeur agréable
Standard behavior classification	FE

Transportation data

Package group	III
State	liquide
IMO class	3.3

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	7.5 ppm
TEEL-2 (mg/m3)	60 ppm
TEEL-3 (mg/m3)	300 ppm

Ecotoxicity

CARBONATE D'ETHYLENE

CAS Number: 96-49-1

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	96-49-1

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1300 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	88
Density of gas (kg/m3)	3.87
Boiling Point (°C)	244
Melting Point (°C)	36
Flash Point (°C)	143

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Reactivity data

Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible

Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

CARBONATE DE CALCIUM boue

CAS Number: 471-34-1

> **Also known as:** CALCIUM CARBONATE slurry, CARBONIC ACID CALCIUM SALT, CHALK

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	471-34-1

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	100.1
Boiling Point (°C)	825

Behaviour at sea

Additional data

Colour	blanc, gris
Odour	inodore

Transportation data

State	solide

Reactivity data

Water	Non
Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible

Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

TLV-TWA	2.4
TEEL-1 (mg/m3)	45
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

CARBURE DE CALCIUM

UN Number: 1402

Also known as: ACETHYLENOGEN, CALCIUM ACETYLIDE, CALCIUM CARBIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1402

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2220 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	64.1
Melting Point (°C)	2300

Behaviour at sea

Additional data

Colour	gris à bleu-noire
Odour	odeur d'aïl
Standard behavior classification	D,SD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	4.3

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	30
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	250

Ecotoxicity

CARBUREACTEUR

UN Number: 1863

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1863

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	810 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	176
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	220
Flash Point (°C)	30
Lower explosivity limit (LEL) (volume %)	1.3

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence
Standard behavior classification	E, FE, F

Transportation data

Transport mode	Vrac,Colis
Package group	I/II/III
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.1/3.2/3.

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	200

Ecotoxicity

CELLULOID (déchets de)

UN Number: 2002

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2002

Physical chemical data

Physical State (20°C)	Solide

Behaviour at sea

Additional data

Transportation data

Package group	III
State	solide
IMO class	4.2

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

CESIUM

UN Number: 1407

Also known as: CAESIUM

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1407

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	132.91

Behaviour at sea

Additional data

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	4.3

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	20
TEEL-2 (mg/m3)	150
TEEL-3 (mg/m3)	500

Ecotoxicity

CHLORATE DE SODIUM

UN Number: 1495 - CAS Number: 7775-09-9

Also known as: CHLORATE OF SODA

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1495
CAS number	7775-09-9

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	106.45
Boiling Point (°C)	1413
Melting Point (°C)	255

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Non

Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Oui
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	0.4
TEEL-3 (mg/m3)	75

Ecotoxicity

CHLORATE DE SODIUM en solution (< 50%)

UN Number: 2428 - CAS Number: 7775-09-9

Also known as: CHLORATE OF SODA

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2428
CAS number	7775-09-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	2500 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	106.4
Boiling Point (°C)	decomp
Melting Point (°C)	248

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	inodore
Standard behavior classification	D/DE

Transportation data

Transport mode	Vrac,Colis
Package group	II/III
State	liquide
Temperature (°C)	ambiante
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Oui

Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	0.4
TEEL-3 (mg/m3)	75

Ecotoxicity

CHLORE

UN Number: 1017

Also known as: BERTHOLITE, CHLORINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1017

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	3.225 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	70.91
Density of gas (kg/m3)	3.225
Boiling Point (°C)	-34
Melting Point (°C)	-101
Vapour Pressure (Pa)	680000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	jaune verdâtre
Odour	irritante, choquante

Transportation data

Transport mode	Gaz,Colis
Ship type	1G
State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	2(2.3)

Reactivity data

Water	Non

Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	30				
TLV-TWA	0.5				
ERPG-3 (ppm)	20				
	10 min	**30 min**	**60 min**	**4 hrs**	**8 hrs**
AEGL-1 (ppm)	0.5	0.5	0.5	0.5	0.5
AEGL-2 (ppm)	2.8	2.8			0.7
AEGL-3 (ppm)	50	28	20	10	7.1

Ecotoxicity

CHLORITE DE CALCIUM

UN Number: 1453

Also known as: CALCIUM CHLORITE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1453

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	243
Melting Point (°C)	100

Behaviour at sea

Additional data

Standard behavior classification	SD

Transportation data

Package group	II
State	solide
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Oui
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

CHLOROBENZENE

UN Number: 1134 - CAS Number: 108-90-7

Also known as: BENZENE CHLORIDE, CHLOROBENZOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1134
CAS number	108-90-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1110 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	112.56
Density of gas (kg/m3)	5.005
Boiling Point (°C)	132
Melting Point (°C)	-45
Vapour Pressure (Pa)	1200 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	660
Flash Point (°C)	28
Lower explosivity limit (LEL) (volume %)	1.3
Upper explosivity limit (UEL) (volume %)	7.1

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur d'amande

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés
IMO class	3.3

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	2400
TLV-TWA	75
TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	150 ppm
TEEL-3 (mg/m3)	400 ppm

Ecotoxicity

CHLOROFORMATE DE BENZYLE

UN Number: 1739

> **Also known as:** BENZYL CHLOROCARBONATE, BENZYL CHLOROFORMATE, CHLOROFORMIC ACID, BENZYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1739

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1220 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	170.6
Boiling Point (°C)	152

Behaviour at sea

Persistence (days)	2.7

Additional data

Colour	incolore
Odour	odeur prononcée et irritante
Standard behavior classification	DE, D, SD

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.125 ppm
TEEL-2 (mg/m3)	0.97 ppm
TEEL-3 (mg/m3)	2.9 ppm

Ecotoxicity

CHLOROFORME

UN Number: 1888 - CAS Number: 67-66-3

> **Also known as:** CHLOROFORM, Formyl Trichloride, Methane Trichloride, Methenyl Trichloride, Methyl Trichloride, Trichloroform, Trichloromethane, Chloroforme

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1888
CAS number	67-66-3
Formula	$CHCl_3$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1490 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.38 [cSt] at a temperature of 20°C 0.36 [cSt] at a temperature of 25°C
Molar mass (g/mol)	119.39
Density of gas (kg/m3)	5.289
Solubility (g/L)	8220 [g/L] at a temperature of 20°C and salinity of 0‰ 7950 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	61
Melting Point (°C)	-63
Critical molar volume (m³/mol)	0.000239
Critical temperature (°C)	536.4
Critical pressure (Pa)	5470000
Surface tension (mN/m)	27.14 [mN/m] at a temperature of 20°C 26.67 [mN/m] at a temperature of 25°C
Interfacial tension (mN/m)	32.8 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	20260 [Pa] at a temperature of 20°C 26000 [Pa] at a temperature of 25°C
Vapor enthalpy (J/Kg)	244.93 [J/Kg] at a temperature of 61.3°C 279364 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	3180000

Specific heat capacity (J/(Kg·K))	956.6
Combustion efficiency (%)	50
Mass flow rate of the combustion surface (Kg/(m²·s))	0.02
Rad fraction (%)	40
Henry's constant (mol/(m³·Pa))	371

Behaviour at sea

Log kow	1.97
Log koc	1.5
Aqueous photolysis (Half-life)	22
Biodegradation in estuary environment (Half-life) (days)	450
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	12.7

Additional data

Colour	incolore
Odour	odeur douce

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

Notable risks	Reacts violently with strong bases, strong oxidants and some metals such as aluminium, magnesium and zinc.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2

Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000	
Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H331	Toxic if inhaled.
	H351	Suspected of causing cancer.
	H361	Suspected of damaging fertility or the unborn child.
	H372	Causes damage to organs through prolonged or repeated exposure, exposure cause the hazard:

Precautionary statements	**Prevention**	
	P202	Do not handle until all safety precautions have been read and understood.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	Disposal	
	P501	Dispose of contents/container to ...

ERPG-2 (ppm)	50
ERPG-3 (ppm)	5000

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	13.3
Lowest median lethal concentration (LC50) on crustacean (mg/l)	29
Lowest median lethal concentration (LC50) on fishes (mg/l)	18
Highest no observed effect concentration (NOEC) on algae (mg/l)	3.61
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	6.3
Highest no observed effect concentration (NOEC) on fishes (mg/l)	1.463
Assessment factor (AF)	50 on the short term 10 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	266 [µg/l] on the short term 146 [µg/l] on the long term

CHLOROHYDRINE ETHYLENIQUE

UN Number: 1135 - CAS Number: 107-07-3

Also known as: 2-CHLOROETHANOL, 2-CHLOROETHYL ALCOHOL, beta-CHLOROETHYL ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1135
CAS number	107-07-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1197 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	80.51
Density of gas (kg/m3)	3.612
Boiling Point (°C)	128.9
Melting Point (°C)	-70
Vapour Pressure (Pa)	730 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	425
Flash Point (°C)	55
Lower explosivity limit (LEL) (volume %)	4.9
Upper explosivity limit (UEL) (volume %)	15.9

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur douce et agréable

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	20
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols
IMO class	6.1

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	10
TEEL-1 (mg/m3)	0.54 ppm
TEEL-2 (mg/m3)	0.66 ppm
TEEL-3 (mg/m3)	0.5 ppm

Ecotoxicity

CHLOROHYDRINES

CAS Number: 96-24-2

> **Also known as:** CHLOROHYDRINS, CHLOROPROPANE DIOLS, CHLOROPROPYLENE GLYCOLS, CRUDE EPICHLOROHYDRIN

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	96-24-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1180 [Kg/m³] at a temperature of 20°C
Vapour Pressure (Pa)	786 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	428
Flash Point (°C)	33.3
Lower explosivity limit (LEL) (volume %)	3.8
Upper explosivity limit (UEL) (volume %)	21

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	odeur irritante d'ail
Standard behavior classification	SD/D

Transportation data

Cargo group	17
State	liquide
Temperature (°C)	ambiante
Family name	épichlorohydrines

Reactivity data

Water	Oui

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	75
TLV-TWA	0.5
ERPG-2 (ppm)	20
ERPG-3 (ppm)	100

Ecotoxicity

CHLOROPROPANE

UN Number: 1278 - CAS Number: 540-54-5

Also known as: CHLORO-1-PROPANE, 1-CHLOROPROPANE, CHLORURE DE PROPYLE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1278
CAS number	540-54-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	892 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	78.54
Density of gas (kg/m3)	3.5
Boiling Point (°C)	46/47
Melting Point (°C)	-123
Ignition Temperature (°C)	520
Flash Point (°C)	-18
Lower explosivity limit (LEL) (volume %)	2.6
Upper explosivity limit (UEL) (volume %)	11

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de chloroforme
Standard behavior classification	FD/FED/E

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide

Temperature (°C)	ambiante
Family name	hydrocarbures halogénés
IMO class	3.1

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

CHLORURE D'ACETYLE

UN Number: 1717

> **Also known as:** ACETIC ACID CHLORIDE, ACETIC CHLORIDE, ACETYL CHLORIDE, ETHANOYL CHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1717

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1103.9 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	78.5
Density of gas (kg/m3)	3.483
Boiling Point (°C)	51
Melting Point (°C)	-112
Vapour Pressure (Pa)	28000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	390
Flash Point (°C)	-4
Lower explosivity limit (LEL) (volume %)	7.3
Upper explosivity limit (UEL) (volume %)	19

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur prononcée
Standard behavior classification	DE, SD

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

IMO class	3.2

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.0075
TEEL-2 (mg/m3)	0.05
TEEL-3 (mg/m3)	125

Ecotoxicity

CHLORURE D'ETHYLE

UN Number: 1037

Also known as: CHLOROETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1037

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.838 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	64.52
Density of gas (kg/m3)	2.838
Boiling Point (°C)	12.4
Melting Point (°C)	-142
Vapour Pressure (Pa)	131690 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	510
Flash Point (°C)	-50
Lower explosivity limit (LEL) (volume %)	3.6
Upper explosivity limit (UEL) (volume %)	14.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur agréable

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	36
State	liq.compr.gas
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés
IMO class	2(2.1)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	20000
TLV-TWA	1000
TEEL-1 (mg/m3)	1500 ppm
TEEL-2 (mg/m3)	3800 ppm
TEEL-3 (mg/m3)	3800 ppm

Ecotoxicity

CHLORURE DE BENZENESULFONYLE

UN Number: 2225 - CAS Number: 98-09-9

> **Also known as:** BENZENESULFONIC CHLORIDE, BENZENESULPHOCHLORIDE, BENZENESULPHONECHLORIDE, BENZENE SULPHONYL CHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2225
CAS number	98-09-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1400 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	176.62
Density of gas (kg/m3)	7.85 (E)
Boiling Point (°C)	251, decomp.
Melting Point (°C)	15
Vapour Pressure (Pa)	130 (66�C) [Pa] at a temperature of 20°C
Flash Point (°C)	128

Behaviour at sea

Additional data

Colour	incolore à brun
Odour	odeur irritante
Standard behavior classification	S/SD

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Specific Health Concern (D3)	Ss - Skin Sensitization
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	1.5
TEEL-2 (mg/m3)	200
TEEL-3 (mg/m3)	200

Ecotoxicity

CHLORURE DE BENZYLE

UN Number: 1738 - CAS Number: 100-44-7

> **Also known as:** BENZYL CHLORIDE, CHLORMETHYLBENZENE, CHLOROPHENYLMETHANE, alpha-CHLOROTOLUENE, Chloromethyl Benzene, Alpha-Chlorotoluene, Chlorure De Benzyle, α-Chlorotoluene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1738
CAS number	100-44-7
Formula	C_7H_7Cl

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	126.6
Density of gas (kg/m3)	5.16
Solubility (g/L)	1200 [g/L] at a temperature of 20°C and salinity of 0‰ 525 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	179.6
Melting Point (°C)	-39
Critical temperature (°C)	411
Surface tension (mN/m)	37.46 [mN/m] at a temperature of 20°C 36.76 [mN/m] at a temperature of 26.3°C
Vapour Pressure (Pa)	120 [Pa] at a temperature of 20°C 133.3 [Pa] at a temperature of 22°C 164 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	585
Flash Point (°C)	60
Flash Point (Pensky-Martens closed cup) (°C)	67
Flash Point (Cleveland open cup) (°C)	74
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	7.1
Vapor enthalpy (J/Kg)	395785 [J/Kg] at a temperature of 25°C

Combus enthalpy (J/Kg)	29292802
Specific heat capacity (J/(Kg·K))	1440
Henry's constant (mol/(m³·Pa))	41.54

Behaviour at sea

Persistence (days)	3.1
Log kow	0.36
Log koc	2.65

Additional data

Colour	incolore à jaune
Odour	odeur prononcée et irritante

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate

Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	10	
Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H331	Toxic if inhaled.
	H335	May cause respiratory irritation.
	H350	May cause cancer.
	H373	May cause damage to organs through prolonged or repeated exposure, exposure cause the hazard:
ERPG-2 (ppm)	10	
ERPG-3 (ppm)	50	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	19.3
Lowest median lethal concentration (LC50) on crustacean (mg/l)	3.9
Lowest median lethal concentration (LC50) on fishes (mg/l)	6
Highest no observed effect concentration (NOEC) on algae (mg/l)	10
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	3.9 [µg/l] on the short term 1 [µg/l] on the long term

CHLORURE DE CADMIUM

UN Number: 2570

> **Also known as:** CADDY, CADMIUM CHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2570

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3327 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	228.35
Boiling Point (°C)	960
Melting Point (°C)	568

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Marine pollutant	P
Standard behavior classification	SD

Transportation data

Transport mode	Vrac,Colis
State	cryst. solide
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.007
TEEL-1 (mg/m3)	0.0489
TEEL-2 (mg/m3)	0.5
TEEL-3 (mg/m3)	14.7

Ecotoxicity

CHLORURE DE CHOLINE en solution

CAS Number: 67-48-1

> **Also known as:** BIOCOLINA, CHOLINE CHLORIDE solutions, CHOLINE CHLOROHYDRATE, CHOLINE HYDROCHLORID, CHOLINIUM CHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	67-48-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	139.65 (solid)
Boiling Point (°C)	100
Melting Point (°C)	305
Vapour Pressure (Pa)	2400 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

Ecotoxicity

CHLORURE DE CUIVRE

UN Number: 2802

Also known as: COPPER CHLORIDE, CUPRIC CHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2802

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3300 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	170.48
Boiling Point (°C)	993
Melting Point (°C)	498

Behaviour at sea

Additional data

Colour	bleu-vert
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	III
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.4 (Cu)
TEEL-1 (mg/m3)	0.317
TEEL-2 (mg/m3)	0.529

Ecotoxicity

CHLORURE DE CYANOGENE

UN Number: 1589

> **Also known as:** CHLORCYAN (T), CHLORINE CYANIDE, CHLOROCYANIDE, CHLOROCYANOGEN, CYANOGEN CHLORIDE inhibited

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1589

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.58 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	61.48
Density of gas (kg/m3)	2.58
Boiling Point (°C)	13
Melting Point (°C)	-6
Vapour Pressure (Pa)	176000 [Pa] at a temperature of 20°C
Flash Point (°C)	51

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur prononcée et âcre

Transportation data

State	liq.compr.gas
IMO class	2(2.3)

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non

Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	45 (as CN)
TLV-TWA	0.3 (CN)
ERPG-2 (ppm)	0.4

Ecotoxicity

CHLORURE DE DIETHYL-ALUMINIUM

UN Number: 3052

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3052

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	129.6
Boiling Point (°C)	194
Melting Point (°C)	-32
Vapour Pressure (Pa)	650 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Standard behavior classification	D, SD, S

Transportation data

State	liquide
IMO class	4.2

Reactivity data

Water	Oui
Acid(s)	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

CHLORURE DE MERCURE (I) solide

UN Number: 3077

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3077

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	7150 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	236.1

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Marine pollutant	P
Standard behavior classification	D, SD, S

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.006 (Pb)
TEEL-1 (mg/m3)	0.0883
TEEL-2 (mg/m3)	1.18
TEEL-3 (mg/m3)	11.8

Ecotoxicity

CHLORURE DE MERCURE AMMONIACAL

UN Number: 1630

> **Also known as:** AMINO MERCURIC CHLORIDE, AMMONIATED MERCURIC CHLORIDE, AMMONIATED MERCURY

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1630

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	5700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	252.1

Behaviour at sea

Persistence (days)	2.7

Additional data

Colour	blanc
Odour	inodore
Marine pollutant	P
Standard behavior classification	D, SD, S

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.012 (Pb)

Ecotoxicity

CHLORURE DE METHYLE

UN Number: 1063

Also known as: CHLOROMETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1063

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.412 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	50.49
Density of gas (kg/m3)	2.412
Boiling Point (°C)	-24
Melting Point (°C)	-98
Vapour Pressure (Pa)	506540 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	625
Flash Point (°C)	-24
Lower explosivity limit (LEL) (volume %)	8.1
Upper explosivity limit (UEL) (volume %)	17.2

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore à odeur douce

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	36
State	gas liquéfié
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés
IMO class	2(2.1)

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	10000
TLV-TWA	50
ERPG-2 (ppm)	400
ERPG-3 (ppm)	1000

Ecotoxicity

CHLORURE DE POTASSIUM

CAS Number: 7447-40-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	7447-40-7

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1980 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	74.55
Boiling Point (°C)	1500
Melting Point (°C)	770
Vapour Pressure (Pa)	2000 (sol. [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	blanc

Transportation data

Transport mode	Vrac (sol.)
Ship type	3 (sol.)
State	solide

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

TEEL-2 (mg/m3)	15
TEEL-3 (mg/m3)	15

Ecotoxicity

CHLORURE DE VINYLE stabilisé

UN Number: 1086

Also known as: CHLORETHENE, CHLOROETHYLENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1086

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.786 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	62.5
Density of gas (kg/m3)	2.786
Boiling Point (°C)	-13.6
Melting Point (°C)	-154
Vapour Pressure (Pa)	340000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	473
Flash Point (°C)	-77
Lower explosivity limit (LEL) (volume %)	3.6
Upper explosivity limit (UEL) (volume %)	33

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur fruitée et agréable
Standard behavior classification	GD, G

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	35
State	gas liquéfié

Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	halogénures de vinyle
IMO class	2(2.1)

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

ERPG-1 (ppm)	500
ERPG-2 (ppm)	5000
ERPG-3 (ppm)	20000

Ecotoxicity

CHLORURE DE VINYLIDENE

UN Number: 1303 - CAS Number: 75-35-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1303
CAS number	75-35-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1210 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	96.95
Density of gas (kg/m3)	4.322
Boiling Point (°C)	31.8
Melting Point (°C)	-122
Vapour Pressure (Pa)	66500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	440
Flash Point (°C)	-10
Lower explosivity limit (LEL) (volume %)	5.6
Upper explosivity limit (UEL) (volume %)	16

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur desagréable

Transportation data

Transport mode	Vrac,Gaz,Colis
Cargo group	35
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	halogénures de vinyle

IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	10
ERPG-2 (ppm)	500
ERPG-3 (ppm)	1000

Ecotoxicity

CHLORURE DE ZINC anhydre

UN Number: 2331 - CAS Number: 7646-85-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2331
CAS number	7646-85-7

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	136.28
Boiling Point (°C)	732
Melting Point (°C)	285

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	III
State	solide
Temperature (°C)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	850
TLV-TWA	0.2
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	50

Ecotoxicity

CHLORURE FERRIQUE anhydre

UN Number: 1773 - CAS Number: 7705-08-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1773
CAS number	7705-08-0

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	162.22
Boiling Point (°C)	315
Melting Point (°C)	306

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	noire verdâtre
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	III
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	5 - ≥ 4000
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	0.4 (Fe)
TEEL-1 (mg/m3)	3.5
TEEL-2 (mg/m3)	25
TEEL-3 (mg/m3)	125

Ecotoxicity

CHLORURE FERRIQUE en solution (39%)

UN Number: 2582 - CAS Number: 7705-08-0

Also known as: CHLORURE DE FER (III)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2582
CAS number	7705-08-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1410 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	110
Melting Point (°C)	-2
Vapour Pressure (Pa)	1466 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	orange/brun
Odour	irritante

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	43
State	liquide
Temperature (°C)	ambiante
Family name	sol. aqueuses diverses

Reactivity data

Water	Non
Acid(s)	Oui

Metal(s) and alloys	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	5 - ≥ 4000
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	3.5
TEEL-2 (mg/m3)	25
TEEL-3 (mg/m3)	125

Ecotoxicity

CHLORURE MERCURIQUE

UN Number: 1624

Also known as: CORROSIVE SUBLIMATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1624

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	5400 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	271.5
Boiling Point (°C)	302
Melting Point (°C)	276
Vapour Pressure (Pa)	0.1 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	3.1

Additional data

Colour	blanc
Odour	inodore
Marine pollutant	P

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.005 (Pb)
TEEL-2 (mg/m3)	13.5
TEEL-3 (mg/m3)	13.5

Ecotoxicity

CHLORURE DE CALCIUM

Also known as: CALCIUM CHLORIDE, CALCIUM DICHLORIDE, CALPUS (T), CALTAC (T), DOWFLAKE (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	110.99
Boiling Point (°C)	1600
Melting Point (°C)	772

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	SD

Transportation data

State	solide, solut.
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non

Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

CIRE DE PARAFFINE

CAS Number: 8002-74-2

Also known as: CIRES DE PARAFFINES

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	8002-74-2

Physical chemical data

Physical State (20°C)	Liquide/Solide
Density (kg/m3)	850/900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	410
Density of gas (kg/m3)	51.85
Boiling Point (°C)	370
Melting Point (°C)	15/90
Vapour Pressure (Pa)	< 100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	> 245
Flash Point (°C)	110

Behaviour at sea

Additional data

Colour	blanc à jaune
Odour	odeur de cire

Transportation data

Package group	III
Cargo group	31
State	liquide/solide
Temperature (°C)	ambiante
Family name	paraffines
IMO class	3.3

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

COLLOPHANE

UN Number: 1286 - CAS Number: 8050-09-7

Also known as: CODOIL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1286
CAS number	8050-09-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1020 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	300/400
Melting Point (°C)	100-150
Vapour Pressure (Pa)	290 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	342
Flash Point (°C)	124/199

Behaviour at sea

Additional data

Colour	légèrement ambré à rouge ou Non
Odour	odeur de sève de pin

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	33
Temperature (°C)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	Ss - Skin Sensitization
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

COPOLYMERE D'ACRYLONITRILE-STYRENE dispersion dans polyether polyol

Also known as: ACRYLONITRILE-STYRENE COPOLYMER dispersion in polyether polyol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1050 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	decomp.
Melting Point (°C)	< -25
Vapour Pressure (Pa)	6665 [Pa] at a temperature of 20°C
Flash Point (°C)	182

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

State	liquide

Reactivity data

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible

Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

Ecotoxicity

CREOSOTE (goudron de bois)

UN Number: 3082 - CAS Number: 8021-39-4

Also known as: BEECHWOOD CREOSOTE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	8021-39-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1050 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	> 80
Density of gas (kg/m3)	3.57
Boiling Point (°C)	195/400
Melting Point (°C)	< 15
Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	335
Flash Point (°C)	68

Behaviour at sea

Additional data

Colour	jaune à noir
Odour	odeur de goudron

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	21
State	liquide
Temperature (°C)	ambiante
Family name	phénols, crésols

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	5 - Very highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

CREOSOTE (goudron de houille)

UN Number: 3082 - CAS Number: 8001-58-9

> **Also known as:** COAL TAR OIL, CREOSOTE OIL, DEAD OIL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	8001-58-9

Physical chemical data

Physical State (20°C)	Liquide/Solide
Density (kg/m3)	1070 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	93.38
Density of gas (kg/m3)	4.17
Boiling Point (°C)	182/400
Melting Point (°C)	-0.146341463
Vapour Pressure (Pa)	300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	336
Flash Point (°C)	> 68

Behaviour at sea

Additional data

Colour	jaune à noir
Odour	odeur de goudron

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	21
Temperature (°C)	ambiante
Family name	phénols, crésols

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	0.6
TEEL-2 (mg/m3)	80
TEEL-3 (mg/m3)	80

Ecotoxicity

CRESOLS (ortho, meta, para)

UN Number: 2076 - CAS Number: 1319-77-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2076
CAS number	1319-77-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1070 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	108.13
Density of gas (kg/m3)	4.799
Boiling Point (°C)	177
Melting Point (°C)	24
Vapour Pressure (Pa)	67 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	600
Flash Point (°C)	63
Lower explosivity limit (LEL) (volume %)	1.1

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore à jaune
Odour	douce, odeur de goudron
Standard behavior classification	SD

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	21
State	liquide, solide
Family name	phénols, crésols

IMO class	6.1

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	250
TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	24.9 ppm
TEEL-3 (mg/m3)	250 ppm

Ecotoxicity

CROTONALDEHYDE stabilisé

UN Number: 1143 - CAS Number: 4170-30-3

Also known as: 2-BUTENAL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1143
CAS number	4170-30-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	852 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	70.09
Density of gas (kg/m3)	3.096
Boiling Point (°C)	102
Melting Point (°C)	-74
Vapour Pressure (Pa)	4000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	230
Flash Point (°C)	13
Lower explosivity limit (LEL) (volume %)	2.1
Upper explosivity limit (UEL) (volume %)	15.5

Behaviour at sea

Additional data

Colour	jaune
Odour	odeur de goudron

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	19
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	aldéhydes
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	4 - High
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	400
ERPG-1 (ppm)	0.2
ERPG-3 (ppm)	15

	10 min	**30 min**	**60 min**	**4 hrs**	**8 hrs**
AEGL-1 (ppm)	0.19	0.19	0.19	0.19	0.19
AEGL-2 (ppm)	27	8.9	4.4	1.1	0.56
AEGL-3 (ppm)	44	27	14	2.6	1.5

Ecotoxicity

CUPRIETHYLENEDIAMINE en solution

UN Number: 1761

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1761

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	100

Behaviour at sea

Additional data

Colour	bleu, violet foncé
Odour	odeur de poisson

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

CUT BACKS (asphalte ou bitume)

UN Number: 1999

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1999

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	noire
Odour	odeur de goudron

Transportation data

Package group	II
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.2/3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

CYANHYDRINE D'ACETONE stabilisé

UN Number: 1541 - CAS Number: 75-86-5

> **Also known as:** ACETONE CYANOHYDRIN stabilized, 2-Hydroxy-2-Methylpropanenitrile, 2-Hydroxy-2-Methylpropionitrile, Acetonecyanhydrine, Cyanhydrine D'Acetone, 2-Methyllacetonitrile, 2-Cyano-2-Propanol, 2-Hydroxyisobutyronitrile, Alpha-Hydroxyisobutyronitrile, Acetone Cyanohydrin, Acetone Cyanohydrine, α-Hydroxyisobutyronitrile

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1541
CAS number	75-86-5
Formula	C_4H_7NO

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	925 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	85.11
Density of gas (kg/m3)	3.741
Solubility (g/L)	930000 [g/L] at a temperature of 20°C and salinity of 0‰ 930000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	82
Melting Point (°C)	-20
Vapour Pressure (Pa)	110 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	685
Flash Point (°C)	74
Flash Point (Pensky-Martens closed cup) (°C)	73.9
Flash Point (Cleveland open cup) (°C)	74
Lower explosivity limit (LEL) (volume %)	2.25
Upper explosivity limit (UEL) (volume %)	11
Combus enthalpy (J/Kg)	26300000
Combustion efficiency (%)	95
Mass flow rate of the combustion surface (Kg/(m²·s))	0.03
Rad fraction (%)	22
Henry's constant (mol/(m³·Pa))	0.34

Behaviour at sea

Log kow	-0.03
Log koc	1.08
Biodegradation in estuary environment (Half-life) (days)	1
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore
Odour	odeur d'amande douce

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	4 - High

Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	45 (as CN)	
Hazard statements	**Health**	
	H300	Fatal if swallowed.
	H310	Fatal in contact with skin.
	H330	Fatal if inhaled.
	H370	Causes damage to organs.
	Environmental	
	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	Wear respiratory protection.
	Response	
	P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	4.5 (CN)	
TEEL-2 (mg/m3)	7.1	
TEEL-3 (mg/m3)	15	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	1.25
Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.13
Lowest median lethal concentration (LC50) on fishes (mg/l)	0.22
Assessment factor (AF)	1000 on the short term
	10000 on the long term

Predicted No Effect Concentration (PNEC) (µg/l)	0.13 [µg/l] on the short term 0.013 [µg/l] on the long term

CYANOHYDRINE ETHYLENIQUE

CAS Number: 109-78-4

Also known as: 2-CYANOETHANOL, 2-CYANOETHYL ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	109-78-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1047 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	71.08
Density of gas (kg/m3)	3.225
Boiling Point (°C)	229.9
Melting Point (°C)	-46
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	494
Flash Point (°C)	21
Lower explosivity limit (LEL) (volume %)	2.3
Upper explosivity limit (UEL) (volume %)	12.1

Behaviour at sea

Additional data

Colour	incolore, jaune-brun
Odour	légère odeur à inodore

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

CYANURE DE CUIVRE

UN Number: 1587

Also known as: COPPER CYANIDE, CUPRIC CYANIDE, CUPROUS CYANIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1587

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	89.56

Behaviour at sea

Additional data

Colour	blanc
Marine pollutant	P

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	45
TLV-TWA	4.5
TEEL-2 (mg/m3)	4.23

TEEL-3 (mg/m3)	7.05

Ecotoxicity

CYANURE DE MERCURE

UN Number: 1636

Also known as: CIANURRINA

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1636

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3996 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	252.63

Behaviour at sea

Persistence (days)	3.1

Additional data

Colour	blanc
Odour	inodore
Marine pollutant	P

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.006 (Pb)
TEEL-1 (mg/m3)	1.5
TEEL-2 (mg/m3)	12.6
TEEL-3 (mg/m3)	12.6

Ecotoxicity

CYANURE DE NICKEL

UN Number: 1653 - CAS Number: 98-95-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1653
CAS number	98-95-3

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2400 [Kg/m³] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	vert clair, jaune-brun
Odour	légère odeur d'amande
Marine pollutant	P
Standard behavior classification	D, SD, S

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	4 - Very high
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	1.13
TEEL-2 (mg/m3)	9.44
TEEL-3 (mg/m3)	18.9

Ecotoxicity

CYANURE DE POTASSIUM

UN Number: 1680

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1680

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1500 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	65.12
Boiling Point (°C)	1625
Melting Point (°C)	635

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	blanc
Odour	odeur d'amande
Standard behavior classification	SD

Transportation data

State	solide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non

Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	20
TLV-TWA	4.5 (CN)
TEEL-3 (mg/m3)	62.6

Ecotoxicity

CYANURE DE SODIUM solide

UN Number: 1689

Also known as: CYANIDE OF SODIUM

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1689

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1600 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	49.01
Boiling Point (°C)	1496
Melting Point (°C)	563

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non

Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	45
TLV-TWA	4.5 (CN)
TEEL-3 (mg/m3)	47.1

Ecotoxicity

CYCLOHEPTANE

UN Number: 2241 - CAS Number: 291-64-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2241
CAS number	291-64-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	811 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.19
Density of gas (kg/m3)	4.37
Boiling Point (°C)	118.5
Melting Point (°C)	-12
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	6.7

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	FE

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	31
State	liquide
Temperature (°C)	ambiante
Family name	paraffines
IMO class	3.2

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

CYCLOHEXANE

UN Number: 1145 - CAS Number: 110-82-7

Also known as: Hexamethylene, Hexanaphthene, Hexahydrobenene, Cyclohexane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1145
CAS number	110-82-7
Formula	C_6H_{12}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	779 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.27 [cSt] at a temperature of 20°C 1.1552 [cSt] at a temperature of 25°C
Molar mass (g/mol)	84.16
Density of gas (kg/m3)	3.741
Solubility (g/L)	55 [g/L] at a temperature of 20°C and salinity of 0‰ 45 [g/L] at a temperature of 15°C and salinity of 0‰
Boiling Point (°C)	80.9
Melting Point (°C)	6.59
Critical molar volume (m³/mol)	0.000308
Critical temperature (°C)	553.8
Critical pressure (Pa)	4080000
Surface tension (mN/m)	24.68 [mN/m] at a temperature of 20°C 24.16 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	10397 [Pa] at a temperature of 20°C 15999 [Pa] at a temperature of 30°C
Ignition Temperature (°C)	260
Flash Point (°C)	-18
Flash Point (Pensky-Martens closed cup) (°C)	-18
Lower explosivity limit (LEL) (volume %)	1.3
Upper explosivity limit (UEL) (volume %)	8.4

Vapor enthalpy (J/Kg)	356195 [J/Kg] at a temperature of 80.73°C 390810 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	46573747
Specific heat capacity (J/(Kg·K))	1841
Henry's constant (mol/(m³·Pa))	15198.7

Behaviour at sea

Log kow	3.4
Log koc	2.68
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	239

Additional data

Colour	incolore
Odour	odeur d'essence

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	31
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	paraffines
IMO class	3.1

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500

Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	10000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H336	May cause drowsiness or dizziness.
	Environmental	
	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P331	Do NOT induce vomiting.
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P391	Collect spillage.

TLV-TWA	300
TEEL-1 (mg/m3)	300 ppm
TEEL-2 (mg/m3)	500 ppm
TEEL-3 (mg/m3)	1300 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	2.4
Lowest median lethal concentration (LC50) on fishes (mg/l)	8.3
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.9
Highest no observed effect concentration (NOEC) on fishes (mg/l)	32
Assessment factor (AF)	100 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	9 [µg/l] on the short term

CYCLOHEXANOL

CAS Number: 108-93-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	108-93-0

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	947 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	100.16
Density of gas (kg/m3)	1.67
Boiling Point (°C)	161
Melting Point (°C)	23
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	300
Flash Point (°C)	68
Lower explosivity limit (LEL) (volume %)	2.4
Upper explosivity limit (UEL) (volume %)	12

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	odeur d'alcool

Transportation data

Cargo group	20
State	liquide, solide
Family name	alcools, glycols

Reactivity data

Water	Non
Acid(s)	Oui

Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	3500
TLV-TWA	50
TEEL-1 (mg/m3)	50 ppm
TEEL-2 (mg/m3)	50 ppm
TEEL-3 (mg/m3)	400 ppm

Ecotoxicity

CYCLOHEXANONE

UN Number: 1915 - CAS Number: 108-94-1

> **Also known as:** Anone, Cyclohexyl Ketone, Hexanon, Ketohexamethylene, Nadone, Pimelic Ketone, Pimelin Ketone, Sextone, Cyclohexanone

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1915
CAS number	108-94-1
Formula	$C_6H_{10}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	950 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	2.32 [cSt] at a temperature of 25°C
Molar mass (g/mol)	98.15
Density of gas (kg/m3)	4.386
Solubility (g/L)	23000 [g/L] at a temperature of 20°C and salinity of 0‰ 25000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	156
Melting Point (°C)	-31.2
Critical temperature (°C)	665
Critical pressure (Pa)	4600000
Surface tension (mN/m)	34 [mN/m] at a temperature of 20°C 35.05 [mN/m] at a temperature of 25°C
Interfacial tension (mN/m)	90 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	470 [Pa] at a temperature of 20°C 690 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	420
Flash Point (°C)	43
Flash Point (Pensky-Martens closed cup) (°C)	43.9
Flash Point (Cleveland open cup) (°C)	53.9
Lower explosivity limit (LEL) (volume %)	1.1

Upper explosivity limit (UEL) (volume %)	9.4
Vapor enthalpy (J/Kg)	459093 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	33600000
Specific heat capacity (J/(Kg·K))	1856.3
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	0.91

Behaviour at sea

Log kow	0.81
Log koc	1.79
Aqueous photolysis (Half-life)	4.3
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	2.23

Additional data

Colour	incolore à jaune clair	
Odour	douce odeur de menthe	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FED	

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	18
State	liquide
Family name	cétones
IMO class	3.3

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	5000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H332	Harmful if inhaled.
Precautionary statements	**Prevention**	
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
TLV-TWA	25	
TEEL-1 (mg/m3)	50 ppm	
TEEL-2 (mg/m3)	50 ppm	
TEEL-3 (mg/m3)	700 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	26
Lowest median lethal concentration (LC50) on crustacean (mg/l)	800

Lowest median lethal concentration (LC50) on fishes (mg/l)	527
Highest no observed effect concentration (NOEC) on algae (mg/l)	26
Assessment factor (AF)	100 on the short term 1000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	260 [µg/l] on the short term 26 [µg/l] on the long term

CYCLOHEXYLAMINE

UN Number: 2357 - CAS Number: 108-91-8

Also known as: AMINOCYCLOHEXANE, AMINOHEXAHYDROBENZENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2357
CAS number	108-91-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	865 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	99.18
Density of gas (kg/m3)	4.386
Boiling Point (°C)	134
Melting Point (°C)	-18
Vapour Pressure (Pa)	1500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	290
Flash Point (°C)	32
Lower explosivity limit (LEL) (volume %)	1.5
Upper explosivity limit (UEL) (volume %)	9.4

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur de poisson

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Family name	amines aliphatiques

Reactivity data

Acid(s)	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	10				
	10 min	**30 min**	**60 min**	**4 hrs**	**8 hrs**
AEGL-1 (ppm)	1.8	1.8	1.8	1.8	1.8
AEGL-2 (ppm)	11	11	8.6	5.4	2.7
AEGL-3 (ppm)	38	38	30	19	9.5

Ecotoxicity

CYCLOPENTANE

UN Number: 1146 - CAS Number: 287-92-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1146
CAS number	287-92-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	740 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	70.1
Density of gas (kg/m3)	3.1
Boiling Point (°C)	49
Melting Point (°C)	-94
Vapour Pressure (Pa)	33500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	380
Flash Point (°C)	-38
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	8.7

Behaviour at sea

Additional data

Colour	incolore
Odour	légère et douce

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	31
State	liquide
Temperature (°C)	ambiante
Family name	paraffines

IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	600
TEEL-1 (mg/m3)	1800 ppm
TEEL-2 (mg/m3)	3840 ppm
TEEL-3 (mg/m3)	15000 ppm

Ecotoxicity

CYCLOPENTENE

UN Number: 2246 - CAS Number: 142-29-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2246
CAS number	142-29-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	68.12
Density of gas (kg/m3)	3.1
Boiling Point (°C)	44
Melting Point (°C)	-93
Vapour Pressure (Pa)	40000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	395
Flash Point (°C)	-30
Lower explosivity limit (LEL) (volume %)	1.5

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	30
State	liquide
Temperature (°C)	refrigerate
Family name	oléfines
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

CYMENES (ortho, meta, para)

UN Number: 2046

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2046

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	857 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	134.2
Density of gas (kg/m3)	6.063
Boiling Point (°C)	177
Melting Point (°C)	-68
Vapour Pressure (Pa)	688840 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	435
Flash Point (°C)	47
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	5.6

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce et agréable
Marine pollutant	P

Transportation data

Package group	III
Cargo group	32
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	hydrocarbures aromatiques

IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

CYPERMETHRIN

UN Number: 2588

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2588

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1250 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	416.3
Boiling Point (°C)	220
Melting Point (°C)	60/80
Vapour Pressure (Pa)	<10000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Marine pollutant	P

Transportation data

Package group	I/II/III
State	solide
IMO class	6.1

Reactivity data

Water	Non
Base(s)	Oui
Metal(s) and alloys	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

DDT

UN Number: 2761

> **Also known as:** AGRITAN, ANOFEX, ARKOTINE, AZOTOX, BOVIDERMOL, CHLOROPHENOTHAN, CHLOROPHENOTHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2761

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1560 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	354.5

Behaviour at sea

Persistence (days)	2.7

Additional data

Colour	incolore
Odour	inodore
Marine pollutant	P
Standard behavior classification	D, SD, S

Transportation data

Package group	III
State	solide
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.06
TEEL-3 (mg/m3)	500

Ecotoxicity

DECAHYDRONAPHTHALENE

UN Number: 1147 - CAS Number: 91-17-8

> **Also known as:** BICYCLO (4,4,0) DECANE, DEC (T), DECALIN (T), DEKALIN (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1147
CAS number	91-17-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	890 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	138.2
Density of gas (kg/m3)	6.192
Boiling Point (°C)	195
Melting Point (°C)	-31
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	250
Flash Point (°C)	56
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	5.4

Behaviour at sea

Additional data

Colour	incolore
Odour	Essence de térébenthine

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

IMO class	3.3

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TLV-TWA	25
TEEL-1 (mg/m3)	1.5 ppm
TEEL-2 (mg/m3)	10 ppm
TEEL-3 (mg/m3)	75 ppm

Ecotoxicity

DECALDEHYDE

UN Number: 3082 - CAS Number: 143-08-8

> **Also known as:** CAPRALDEHYDE, CAPRIC ALDEHYDE, 1-DECANAL, n-DECANAL, 1-DECYL ALDEHYDE, 1, Nonanol, N-Nonyl Alcohol, Nonanol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	143-08-8
Formula	$C_9H_{20}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	830 [Kg/m³] at a temperature of 20°C
	838.3 [Kg/m³] at a temperature of 5°C
	834.8 [Kg/m³] at a temperature of 10°C
	829.1 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	14.142 [cSt] at a temperature of 20°C
	11.014 [cSt] at a temperature of 25°C
	18.192 [cSt] at a temperature of 5°C
	22.484 [cSt] at a temperature of 10°C
	14.944 [cSt] at a temperature of 20°C
Molar mass (g/mol)	145.3
Density of gas (kg/m3)	6.94
Solubility (g/L)	0.14 [g/L] at a temperature of 25°C and salinity of 0‰
	130 [g/L] at a temperature of 20°C and salinity of 0‰
	120 [g/L] at a temperature of 20°C and salinity of 5‰
	94 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	209
Melting Point (°C)	-5
Critical molar volume (m³/mol)	0.000572
Critical temperature (°C)	670.7
Critical pressure (Pa)	2528000

Surface tension (mN/m)	27.89 [mN/m] at a temperature of 25°C 28.91 [mN/m] at a temperature of 5.7°C 28.02 [mN/m] at a temperature of 11.2°C 27.8 [mN/m] at a temperature of 18.8°C
Vapour Pressure (Pa)	29 [Pa] at a temperature of 20°C
Vapor enthalpy (J/Kg)	532810 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	41198164
Specific heat capacity (J/(Kg·K))	2470
Henry's constant (mol/(m³·Pa))	3.14

Behaviour at sea

Log kow	4.26
Log koc	2.46
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	160

Additional data

Colour	incolore à jaune clair
Odour	odeur agréagle

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Cargo group	19
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	aldéhydes

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4

Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	7.5 ppm
TEEL-2 (mg/m3)	50 ppm
TEEL-3 (mg/m3)	250 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	25
Lowest median lethal concentration (LC50) on fishes (mg/l)	5.7
Assessment factor (AF)	50 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	8 [µg/l] on the short term

DECANE

UN Number: 2247 - CAS Number: 124-18-5

Also known as: n-ALKANES (C10+), n-DECANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2247
CAS number	124-18-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	730 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	142.29
Density of gas (kg/m3)	6.32
Boiling Point (°C)	174
Melting Point (°C)	-30
Vapour Pressure (Pa)	52 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	210
Flash Point (°C)	46
Lower explosivity limit (LEL) (volume %)	0.82
Upper explosivity limit (UEL) (volume %)	5.4

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	F/FD

Transportation data

Package group	III
Cargo group	31
State	liquide

Temperature (°C)	ambiante
Family name	paraffines
IMO class	3.3

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	0.2 ppm
TEEL-2 (mg/m3)	1.25 ppm
TEEL-3 (mg/m3)	5000 ppm

Ecotoxicity

DECENE-1

UN Number: 3295 - CAS Number: 872-05-9

Also known as: 1-DECENE, N-DECYLENE, Decene, Decylene, Dec-1-Ene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3295
CAS number	872-05-9
Formula	$C_{10}H_{20}$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	741 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.75 [cSt] at a temperature of 20°C 1.0205 [cSt] at a temperature of 25°C
Molar mass (g/mol)	140.2
Solubility (g/L)	0.115 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	170
Melting Point (°C)	-66
Critical molar volume (m³/mol)	0.000584
Critical temperature (°C)	617
Critical pressure (Pa)	2220000
Surface tension (mN/m)	24 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	150 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	210
Flash Point (°C)	46
Flash Point (Pensky-Martens closed cup) (°C)	45
Lower explosivity limit (LEL) (volume %)	0.5
Upper explosivity limit (UEL) (volume %)	5.4
Vapor enthalpy (J/Kg)	359530 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2144
Henry's constant (mol/(m³·Pa))	54715

Behaviour at sea

Log kow	4.7
Log koc	1.724
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	488

Additional data

Colour	incolore	
Odour	odeur agréable	
MARPOL pollution category	**Category**	**Description**
	X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.
Standard behavior classification	D, FD, F	

Transportation data

Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines

Reactivity data

Water	Non
Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	Environmental	
	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P273	Avoid release to the environment.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P331	Do NOT induce vomiting.
	P391	Collect spillage.

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	22
Lowest median lethal concentration (LC50) on crustacean (mg/l)	480
Lowest median lethal concentration (LC50) on fishes (mg/l)	> 1000

DEXTROSE en solution

CAS Number: 50-99-7

Also known as: COM SUGAR SOLUTION

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	50-99-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1200 (E) [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	180.2
Boiling Point (°C)	> 100
Melting Point (°C)	146

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	43
State	liquide
Temperature (°C)	54.4/62.7
Family name	sol. aqueuses diverses

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

TEEL-1 (mg/m3)	1.25
TEEL-2 (mg/m3)	7.5
TEEL-3 (mg/m3)	500

Ecotoxicity

DI-n-BUTYL AMINE

UN Number: 2248

Also known as: N-BUTYL-1-BUTANAMINE, DI-(normal)-BUTYL AMINE, N-DIBUTYLAMINE, DNBA (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2248

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	759 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	129.25
Boiling Point (°C)	159
Vapour Pressure (Pa)	300 [Pa] at a temperature of 20°C
Lower explosivity limit (LEL) (volume %)	1.1

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore
Odour	odeur de poisson, d'ammoniaque
Standard behavior classification	D, FED, FE

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non

Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.75 ppm
TEEL-2 (mg/m3)	5 ppm
TEEL-3 (mg/m3)	50 ppm

Ecotoxicity

DIACETATE D'ETHYLENEGLYCOL

CAS Number: 111-55-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	111-55-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1104 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	146.1
Boiling Point (°C)	190.9
Melting Point (°C)	-41.5
Ignition Temperature (°C)	482
Flash Point (°C)	98
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	8.4

Behaviour at sea

Additional data

Colour	incolore
Odour	légèrement fruitée
Standard behavior classification	D/DE

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

DIACETONE ALCOOL

UN Number: 1148

> **Also known as:** DIACETONE, DIACETONE ALCOHOL, DIKETONE ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1148

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	938 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.16
Density of gas (kg/m3)	1.806
Boiling Point (°C)	169.4
Melting Point (°C)	-47
Vapour Pressure (Pa)	140 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	640
Flash Point (°C)	58
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	6.9

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	douce odeur agréable

Transportation data

Package group	III
Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	alcools, glycols
IMO class	3.2/3.3

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	2100
TLV-TWA	50
TEEL-1 (mg/m3)	50 ppm
TEEL-2 (mg/m3)	50 ppm
TEEL-3 (mg/m3)	1800 ppm

Ecotoxicity

DIBROMODIFLUOROMETHANE

UN Number: 1941

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1941

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	2270 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	209.8
Density of gas (kg/m3)	8.7
Boiling Point (°C)	22.8
Melting Point (°C)	-101.1
Vapour Pressure (Pa)	83000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Transportation data

Package group	III
State	liquide
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

DIBROMOMETHANE

UN Number: 2664 - CAS Number: 74-95-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2664
CAS number	74-95-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	2497 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	173.83
Density of gas (kg/m3)	7.80 (E)
Boiling Point (°C)	99
Melting Point (°C)	-52
Vapour Pressure (Pa)	4650 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	douce et plaisante
Standard behavior classification	SD

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
State	liquide
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

Water	Non

Metal(s) and alloys	Oui (Al, Mn, Zn)

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	30 ppm
TEEL-2 (mg/m3)	200 ppm
TEEL-3 (mg/m3)	1250 ppm

Ecotoxicity

DIBROMURE D'ETHYLENE

UN Number: 1605 - CAS Number: 106-93-4

> **Also known as:** BOWFUME (T), BROMOFUME (T), DBE, sym-DIBROMETHANE, 1,2-DIBROMOETHANE, EDB

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1605
CAS number	106-93-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	2180 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	187.86
Density of gas (kg/m3)	8.359
Boiling Point (°C)	131
Melting Point (°C)	10
Vapour Pressure (Pa)	1133 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	SD

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés

IMO class	6.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	400
TLV-TWA	20
TEEL-1 (mg/m3)	17 ppm
TEEL-2 (mg/m3)	24 ppm
TEEL-3 (mg/m3)	46 ppm

Ecotoxicity

DICHLORO-1,2 ETHYLENE

UN Number: 1150

> **Also known as:** ACETYLENE DICHLORIDE, 1,2-DICHLOROETHYLENE, 1,2-DICHLORO-ETHYLENE, DIOFORM

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1150

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1270 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	97
Density of gas (kg/m3)	4.386
Boiling Point (°C)	60
Melting Point (°C)	-80
Vapour Pressure (Pa)	8000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	460
Lower explosivity limit (LEL) (volume %)	9.7
Upper explosivity limit (UEL) (volume %)	13

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce et agréable

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	4000
TLV-TWA	200

Ecotoxicity

DICHLOROBENZENE (ortho-)

UN Number: 1591

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1591

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1306 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	147.01
Density of gas (kg/m3)	6.54
Boiling Point (°C)	180
Melting Point (°C)	-18
Vapour Pressure (Pa)	23328 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	640
Flash Point (°C)	66
Lower explosivity limit (LEL) (volume %)	2.2
Upper explosivity limit (UEL) (volume %)	9.2

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur agréable

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
State	liquide
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000
TLV-TWA	75
TEEL-1 (mg/m3)	50 ppm
TEEL-2 (mg/m3)	50 ppm
TEEL-3 (mg/m3)	200 ppm

Ecotoxicity

DICHLOROMETHANE

UN Number: 1593 - CAS Number: 75-09-2

> **Also known as:** AEROTHANE MM (T), DCM, Dichloromethane, Methylene Dichloride, Methane Dichloride, Methylene Bichloride, Methylene Chloride

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1593
CAS number	75-09-2
Formula	CH_2Cl_2

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1322 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.32 [cSt] at a temperature of 20°C 0.31132 [cSt] at a temperature of 25°C
Molar mass (g/mol)	84.93
Density of gas (kg/m3)	3.741
Solubility (g/L)	20000 [g/L] at a temperature of 20°C and salinity of 0‰ 16700 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	40
Melting Point (°C)	-97
Critical temperature (°C)	510
Critical pressure (Pa)	6100000
Surface tension (mN/m)	28.33 [mN/m] at a temperature of 20°C 27.2 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	47000 [Pa] at a temperature of 20°C 58200 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	665
Lower explosivity limit (LEL) (volume %)	12
Upper explosivity limit (UEL) (volume %)	19
Vapor enthalpy (J/Kg)	330390 [J/Kg] at a temperature of 40°C 339338 [J/Kg] at a temperature of 25°C

Combus enthalpy (J/Kg)	6050000
Specific heat capacity (J/(Kg·K))	1191.6
Combustion efficiency (%)	33
Mass flow rate of the combustion surface (Kg/(m²·s))	0.03
Rad fraction (%)	40
Henry's constant (mol/(m³·Pa))	206

Behaviour at sea

Log kow	1.3
Log koc	1.4
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	40

Additional data

Colour	incolore
Odour	odeur douce et agréable

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	SD

Transportation data

Package group	III
Cargo group	36
State	liquide
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

Notable risks	On combustion, forms toxic and corrosive fumes Reacts with alkalis.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100

Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	C - Carcinogenicity
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	5000	
Hazard statements	**Health**	
	H351	Suspected of causing cancer.
Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P281	Use personal protective equipment as required.
	Response	
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	Storage	
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	500	
ERPG-1 (ppm)	300	
ERPG-2 (ppm)	750	
ERPG-3 (ppm)	4000	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	500
Lowest median lethal concentration (LC50) on crustacean (mg/l)	108.5
Lowest median lethal concentration (LC50) on fishes (mg/l)	97

Highest no observed effect concentration (NOEC) on algae (mg/l)	550
Highest no observed effect concentration (NOEC) on fishes (mg/l)	82.5
Assessment factor (AF)	50 on the short term 50 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1940 [µg/l] on the short term 1650 [µg/l] on the long term

DICHLOROPHENOL(S) solide

UN Number: 2020 - CAS Number: 120-83-2

> **Also known as:** 2,4-DICHLOROPHENOL solid

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2020
CAS number	120-83-2

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1400 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	163.01
Density of gas (kg/m3)	1400
Boiling Point (°C)	216
Melting Point (°C)	45
Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	500
Flash Point (°C)	113

Behaviour at sea

Persistence (days)	1.9

Additional data

Colour	incolore
Odour	odeur de médicaments

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	solide
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

ERPG-1 (ppm)	0.2
ERPG-3 (ppm)	20

Ecotoxicity

DICHLOROPROPENES

UN Number: 2047 - CAS Number: 8003-19-8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2047
CAS number	8003-19-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	110.98
Density of gas (kg/m3)	4.64
Boiling Point (°C)	77
Melting Point (°C)	-60
Vapour Pressure (Pa)	5598 [Pa] at a temperature of 20°C
Flash Point (°C)	29
Lower explosivity limit (LEL) (volume %)	5.3
Upper explosivity limit (UEL) (volume %)	14.5

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	15
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	allyles substitués

IMO class	3.3

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

DICHLORURE D'ETHYLENE

UN Number: 1184 - CAS Number: 107-06-2

> **Also known as:** BORER SOL, BROCIDE, 1,2-DCE, DESTRUXOL BORER SOL, DICHLOREMULSION, 1,2-DICHLOROETHANE, alpha,beta-DICHLORO ETHANE, DICHLORO-1,2-ETHANE, sym-DICHLOROETHANE, DICHLORURE D'ETHYLENE, DUTCH LIQUID, DUTCH OIL, EDC, ENT 1656, ETHANE DICHLORIDE, 1,2-Ethylene Dichloride, Ethylene Chloride, Bichlorure D'Ethylene, Chlorure D'Ethylene, Sym-Dichloroethane, Ethylene Dichloride

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1184
CAS number	107-06-2
Formula	$C_2H_4Cl_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1253 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.67 [cSt] at a temperature of 20°C 0.62 [cSt] at a temperature of 25°C
Molar mass (g/mol)	98.96
Density of gas (kg/m3)	4.386
Solubility (g/L)	8690 [g/L] at a temperature of 20°C and salinity of 0‰ 8600 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	83.7
Melting Point (°C)	-36
Critical molar volume (m³/mol)	0.000225
Critical temperature (°C)	561
Critical pressure (Pa)	5400000
Surface tension (mN/m)	32.2 [mN/m] at a temperature of 20°C 31.86 [mN/m] at a temperature of 25°C
Interfacial tension (mN/m)	30 [mN/m] at a temperature of 25°C and salinity of 0‰
Vapour Pressure (Pa)	8700 [Pa] at a temperature of 20°C 10546 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	440

Flash Point (°C)	13
Flash Point (Pensky-Martens closed cup) (°C)	13
Flash Point (Cleveland open cup) (°C)	18
Lower explosivity limit (LEL) (volume %)	6.2
Upper explosivity limit (UEL) (volume %)	16
Vapor enthalpy (J/Kg)	323160 [J/Kg] at a temperature of 83.5°C 355295 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	11200000
Specific heat capacity (J/(Kg·K))	1297.5
Combustion efficiency (%)	50
Mass flow rate of the combustion surface (Kg/(m²·s))	0.04
Rad fraction (%)	40
Henry's constant (mol/(m³·Pa))	111.46

Behaviour at sea

Log kow	1.48
Log koc	1.45
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	2.75

Additional data

Colour	incolore	
Odour	odeur douce	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	SD	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés

IMO class	3.2

Reactivity data

Static electricity	Oui
Notable risks	On combustion, forms toxic and corrosive fumes Reacts with oxidizers.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	C - Carcinogenicity
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
	H350	May cause cancer.

Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P311	Call a POISON CENTER or doctor/physician.

ERPG-1 (ppm)	50
ERPG-2 (ppm)	200
ERPG-3 (ppm)	300

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	166
Lowest median lethal concentration (LC50) on crustacean (mg/l)	85
Lowest median lethal concentration (LC50) on fishes (mg/l)	11.8
Highest no observed effect concentration (NOEC) on algae (mg/l)	53
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	10.6
Highest no observed effect concentration (NOEC) on fishes (mg/l)	14
Assessment factor (AF)	10 on the short term 10 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1180 [µg/l] on the short term 1060 [µg/l] on the long term

DICHROMATE DE SODIUM

CAS Number: 10588-01-9

Also known as: BICHROMATE OF SODA

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	10588-01-9

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2350 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	262.01
Boiling Point (°C)	decomp.
Melting Point (°C)	357

Behaviour at sea

Additional data

Colour	rouge à orange
Odour	odeur d'amande
Standard behavior classification	SD

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui

Reducing agents	Non
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	115
TLV-TWA	0.02 (Cr)
TEEL-1 (mg/m3)	20
TEEL-2 (mg/m3)	37.8
TEEL-3 (mg/m3)	37.8

Ecotoxicity

DICYCLOPENTADIENE

UN Number: 2048 - CAS Number: 77-73-6

> **Also known as:** Dicyclopentadiene, Cyclopentadiene Dimer, Bicyclopentadiene, 1,3-Cyclopentadiene Dimer

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2048
CAS number	77-73-6
Formula	$C_{10}H_{12}$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Solid
Density (kg/m3)	978 [Kg/m³] at a temperature of 20°C 930.2 [Kg/m³] at a temperature of 35°C
Kinematic viscosity (cSt)	0.79 [cSt] at a temperature of 21°C
Molar mass (g/mol)	132.31
Density of gas (kg/m3)	5.934
Solubility (g/L)	20 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	170
Melting Point (°C)	32
Critical temperature (°C)	659.95
Critical pressure (Pa)	3060000
Vapour Pressure (Pa)	1300 [Pa] at a temperature of 20°C 1300 [Pa] at a temperature of 37.7°C
Flash Point (°C)	104
Flash Point (Cleveland open cup) (°C)	32
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	6.3
Combus enthalpy (J/Kg)	43700000
Specific heat capacity (J/(Kg·K))	1700
Henry's constant (mol/(m³·Pa))	1084.2

Behaviour at sea

Log kow	2.78
Log koc	3.18
Aqueous photolysis (Half-life)	32
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	100

Additional data

Colour	incolore	
Odour	odeur de camphre	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FE	

Transportation data

Package group	III
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H330	Fatal if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P330	Rinse mouth.
	P391	Collect spillage.

ERPG-1 (ppm)	0.01
ERPG-3 (ppm)	75

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	27
Lowest median lethal concentration (LC50) on crustacean (mg/l)	8.0
Lowest median lethal concentration (LC50) on fishes (mg/l)	4.3
Highest no observed effect concentration (NOEC) on algae (mg/l)	18
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	3.2
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	43 [µg/l] on the short term 32 [µg/l] on the long term

Diesel Marine Leger

CAS Number: 68476-34-6

> **Also known as:** Mdo, Marine Diesel Oil, Diesel Marine Leger

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	68476-34-6

Physical chemical data

Physical State (25°C)	Liquid
Mixed	Yes
Solubility (g/L)	0 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	150
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	5

Behaviour at sea

Additional data

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Reactivity data

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

Ecotoxicity

DIETHANOLAMINE

CAS Number: 111-42-2

> **Also known as:** BIS-2-HYDROXY ETHYLAMINE, DEA (T), DIETHYLALAMINE, DIETHYLAMINE, 2,2-DIHYDROXY, DIETHYLOLAMINE, 2,2-DIHYDROXYDIETHYL AMINE, DI (2-HYDROXY ETHYL) AMINE, DIOLAMINE, DIOLAMINE (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	111-42-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1095 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	105.14
Density of gas (kg/m3)	4.709
Boiling Point (°C)	268
Melting Point (°C)	28
Vapour Pressure (Pa)	1.3 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	660
Flash Point (°C)	138
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	10.8

Behaviour at sea

Additional data

Colour	incolore, blanc
Odour	poisson pourri, ammoniaque

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	alkanolamines

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Specific Health Concern (D3)	T - Specific Target Organ Toxicity following single or repeated exposure
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	150
TEEL-2 (mg/m3)	300
TEEL-3 (mg/m3)	300

Ecotoxicity

DIETHYLAMINE

UN Number: 1154 - CAS Number: 109-89-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1154
CAS number	109-89-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	708 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	73.14
Density of gas (kg/m3)	3.264
Boiling Point (°C)	55
Melting Point (°C)	-50
Vapour Pressure (Pa)	53320 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	310
Flash Point (°C)	-20
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	10.1

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de poisson, d'ammoniaque
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Family name	amines aliphatiques
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3C - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2000
TLV-TWA	10
TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	75 ppm
TEEL-3 (mg/m3)	200 ppm

Ecotoxicity

DIETHYLBENZENES

UN Number: 2049 - CAS Number: 25340-17-4

Also known as: DIETHYLBENZENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2049
CAS number	25340-17-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	860 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	134.21
Density of gas (kg/m3)	5.96
Boiling Point (°C)	180
Melting Point (°C)	-57
Vapour Pressure (Pa)	133 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	423
Flash Point (°C)	56
Upper explosivity limit (UEL) (volume %)	12.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce, d'essence

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	32
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	hydrocarbures aromatiques
IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

ERPG-1 (ppm)	10
ERPG-2 (ppm)	100
ERPG-3 (ppm)	500

Ecotoxicity

DIETHYLENE GLYCOL

CAS Number: 111-46-6

> **Also known as:** CELLOSOHE (T), DEG (T), DICOL (T), DIGLYCOL, DIHYDROXYDIETHYL ETHER, 2,2'-Oxybisethanol, 2,2'-Oxydiethanol, Bis(2-Hydroxyethyl) Ether, Ethanol, 2,2'-Oxybis-, 2-Hydroxyethyl Ether, Diethylene Glycol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	111-46-6
Formula	$C_4H_{10}O_3$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1118 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	32.2 [cSt] at a temperature of 20°C 32.2 [cSt] at a temperature of 25°C
Molar mass (g/mol)	106.12
Density of gas (kg/m3)	4.72
Solubility (g/L)	1120000 [g/L] at a temperature of 20°C and salinity of 0‰ 1120000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	245
Melting Point (°C)	-6
Critical temperature (°C)	750
Critical pressure (Pa)	4700000
Surface tension (mN/m)	45.21 [mN/m] at a temperature of 20°C 44.77 [mN/m] at a temperature of 25°C
Ignition Temperature (°C)	225
Flash Point (°C)	124
Flash Point (Pensky-Martens closed cup) (°C)	124
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	10.8
Vapor enthalpy (J/Kg)	492745 [J/Kg] at a temperature of 246°C
Combus enthalpy (J/Kg)	20300000

Specific heat capacity (J/(Kg·K))	2306.4
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.02
Rad fraction (%)	22
Henry's constant (mol/(m³·Pa))	0

Behaviour at sea

Log kow	-1.47
Log koc	0.55
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore
Odour	inodore

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Cargo group	40
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	glycol éthers

Reactivity data

Abilities	Miscible in water.
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H373	May cause damage to organs through prolonged or repeated exposure, exposure cause the hazard:
TLV-TWA	100	
TEEL-1 (mg/m3)	40 ppm	
TEEL-2 (mg/m3)	200 ppm	
TEEL-3 (mg/m3)	200ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	> 1000
Lowest median lethal concentration (LC50) on crustacean (mg/l)	48900
Lowest median lethal concentration (LC50) on fishes (mg/l)	77900
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	8590
Highest no observed effect concentration (NOEC) on fishes (mg/l)	15380
Assessment factor (AF)	1000 on the short term 10000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1000 [µg/l] on the short term 100 [µg/l] on the long term

DIETHYLENETRIAMINE

UN Number: 2079 - CAS Number: 111-40-0

Also known as: BIS(2-AMINOETHYL)AMINE, 2,2-DIAMINODIETHYLAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2079
CAS number	111-40-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	954 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	103.17
Density of gas (kg/m3)	4.515
Boiling Point (°C)	207
Melting Point (°C)	-39
Vapour Pressure (Pa)	50 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	395
Flash Point (°C)	102
Upper explosivity limit (UEL) (volume %)	10

Behaviour at sea

Additional data

Colour	incolore à jaune
Odour	odeur d'ammoniac

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	amines aliphatiques

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	1 ppm
TEEL-2 (mg/m3)	1.25 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

DIETHYLETHANOLAMINE

UN Number: 2686

> **Also known as:** DIETHYLAMINOETHANOL, N-DIETHYLAMINOETHANOL, 2-DIETHYLAMINOETHANOL, beta-DIETHYLAMINOETHYLALCOHOL, DIETHYL(2-HYDROXYETHYL)AMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2686

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	117.2
Density of gas (kg/m3)	5.16
Boiling Point (°C)	161
Melting Point (°C)	-70
Vapour Pressure (Pa)	190 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	320
Flash Point (°C)	60
Lower explosivity limit (LEL) (volume %)	6.7
Upper explosivity limit (UEL) (volume %)	11.7

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Family name	alkanolamines

Reactivity data

Acid(s)	Oui
Metal(s) and alloys	Oui (light metals, Cu)
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable

Human toxicity threshold

TLV-TWA	10
TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	20 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

DIHYDROGENOPHOSPHATE D'AMMONIUM

> **Also known as:** AMMONIUM DIHYDROGEN ORTHOPHOSPHATE, AMMONIUM DIHYDROGENPHOSPHATE, AMMONIUM PHOSPHATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1803 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	115.02
Melting Point (°C)	190/205

Behaviour at sea

Additional data

Transportation data

State	solide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

DIISOBUTYLAMINE

UN Number: 2361 - CAS Number: 110-96-3

Also known as: N,N,-BIS(2-METHYLPROPYL)AMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2361
CAS number	110-96-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	745 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	129.25
Density of gas (kg/m3)	5.75
Boiling Point (°C)	139.5
Melting Point (°C)	-70
Vapour Pressure (Pa)	< 1475 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	290
Flash Point (°C)	29

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur ammoniacale
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	amines aliphatiques

IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Oui (Al, Cu, Zn)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	0.6 ppm
TEEL-2 (mg/m3)	4 ppm
TEEL-3 (mg/m3)	20 ppm

Ecotoxicity

DIISOBUTYLCETONE

UN Number: 1157 - CAS Number: 108-83-8

> **Also known as:** DIBK (T), DIISOBUTYL KETONE, S-DIISOPROPYLACETONE, sym-DI ISOPROPYL ACETONE, 2,6-DIMETHYL-4-HEPTANONE, 2,6-DIMETHYL-HEPTAN-4-ONE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1157
CAS number	108-83-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	806 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	142.23
Density of gas (kg/m3)	2.451
Boiling Point (°C)	163
Melting Point (°C)	-42
Vapour Pressure (Pa)	227 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	396
Flash Point (°C)	49
Lower explosivity limit (LEL) (volume %)	0.81
Upper explosivity limit (UEL) (volume %)	7.1

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	D, FD, F

Transportation data

Package group	III
Cargo group	18

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	cétones
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	2000
TLV-TWA	25
TEEL-1 (mg/m3)	50 ppm
TEEL-2 (mg/m3)	50 ppm
TEEL-3 (mg/m3)	500 ppm

Ecotoxicity

DIISOBUTYLENE

UN Number: 2050 - CAS Number: 11071-47-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2050
CAS number	11071-47-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	112.22
Density of gas (kg/m3)	5.16
Boiling Point (°C)	102
Melting Point (°C)	-100
Vapour Pressure (Pa)	4826 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	305
Flash Point (°C)	-5
Lower explosivity limit (LEL) (volume %)	0.9 (E)

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Family name	oléfines
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Oui
Static electricity	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

DIISOCYANATE D'ISOPHORONE

UN Number: 2290 - CAS Number: 4098-71-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2290
CAS number	4098-71-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1060 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	222.32
Density of gas (kg/m3)	9.93
Boiling Point (°C)	decomp at 310
Melting Point (°C)	-60
Vapour Pressure (Pa)	40 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	430
Flash Point (°C)	163
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	4.5

Behaviour at sea

Additional data

Colour	incolore ou jaunâtre
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	12
Family name	isocyanates
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui (Al, Cu)
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	0.005
TEEL-1 (mg/m3)	0.02 ppm
TEEL-2 (mg/m3)	0.135 ppm
TEEL-3 (mg/m3)	6 ppm

Ecotoxicity

DIISOCYANATE DE DIPHENYLMETHANE-4,4

UN Number: 2489 - CAS Number: 101-68-8

Also known as: DIPHENYLMETHANE-4,4'-DIISOCYANATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2489
CAS number	101-68-8

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	250.3
Boiling Point (°C)	392
Melting Point (°C)	37
Ignition Temperature (°C)	240
Flash Point (°C)	196

Behaviour at sea

Persistence (days)	2.7

Additional data

Colour	blanc à jaune clair
Standard behavior classification	D, SD

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	12
State	solide
Temperature (°C)	-18° to 5°
Pressure (Pa)	pressurisé
Family name	isocyanates

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	10
TLV-TWA	0.02
ERPG-1 (ppm)	0.2 mg
ERPG-2 (ppm)	2 mg
ERPG-3 (ppm)	25 mg

Ecotoxicity

DIISOCYANATE DE TOLUENE

UN Number: 2078 - CAS Number: 584-84-9

> **Also known as:** Toluene-2,4-Diisocyanate, 2,4-Diisocyanate-1-Methylbenzene, Toluene Diisocyanate, Diisocyanate De Toluene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2078
CAS number	584-84-9
Formula	$C_9H_6N_2O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1220 [Kg/m³] at a temperature of 20°C 1224.4 [Kg/m³] at a temperature of 25°C
Molar mass (g/mol)	174.16
Density of gas (kg/m3)	7.74
Solubility (g/L)	37.6 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	250
Melting Point (°C)	14
Surface tension (mN/m)	25 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	3998 [Pa] at a temperature of 20°C 3 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	620
Flash Point (°C)	135
Flash Point (Pensky-Martens closed cup) (°C)	127
Flash Point (Cleveland open cup) (°C)	132
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	9.5
Combus enthalpy (J/Kg)	23900000
Specific heat capacity (J/(Kg·K))	1653
Henry's constant (mol/(m³·Pa))	1.11

Behaviour at sea

Persistence (days)	2.7
Log kow	3.74
Log koc	3.87
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	1

Additional data

Colour	incolore à jaune clair
Odour	odeur agréable

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	D, SD

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	12
State	liquide
Temperature (°C)	24° - 38°
Pressure (Pa)	pressurisé
Family name	isocyanates
IMO class	6.1

Reactivity data

Water	Oui
Abilities	Reacts with water.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	10	
Hazard statements	**Health**	
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H330	Fatal if inhaled.
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335	May cause respiratory irritation.
	H351	Suspected of causing cancer.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	Wear respiratory protection.
	Response	
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	0.005
TEEL-1 (mg/m3)	0.75 ppm
TEEL-2 (mg/m3)	2 ppm
TEEL-3 (mg/m3)	2 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	164
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1.1

DIISOCYANATE DE TRIMETHYLHEXAMETHYLENE (2,2,4 et 2,4,4)

UN Number: 2328 - CAS Number: 28679-16-5

Also known as: 1,6-DIISOCYANATO-2,2,4(2,4,4)-TRIMETHYLHEXANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2328
CAS number	28679-16-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1010 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	210.27
Density of gas (kg/m3)	9.42
Boiling Point (°C)	291
Melting Point (°C)	-80
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	440
Flash Point (°C)	> 200 (E)
Lower explosivity limit (LEL) (volume %)	1.1

Behaviour at sea

Additional data

Colour	incolore ou jaunâtre
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III

Cargo group	12
State	liquide
Family name	isocyanates
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

DIISOPROPANOLAMINE

CAS Number: 110-97-4

> **Also known as:** DIPA, DIPROPYL-2,2-DIHYDROXYAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	110-97-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	990 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	133.19
Density of gas (kg/m3)	5.92
Boiling Point (°C)	248
Melting Point (°C)	42
Ignition Temperature (°C)	374
Flash Point (°C)	127
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	5.4

Behaviour at sea

Additional data

Colour	incolore, blanc à jaune
Odour	poisson pourri, ammoniaque

Transportation data

State	liquide, solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alkanolamines

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

DIISOPROPYLAMINE

UN Number: 1158 - CAS Number: 108-18-9

Also known as: DIPA

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1158
CAS number	108-18-9

Physical chemical data

Density (kg/m3)	717 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	101.19
Density of gas (kg/m3)	4.5
Boiling Point (°C)	84
Melting Point (°C)	-61
Vapour Pressure (Pa)	9331 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	275
Flash Point (°C)	-15
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	7.1

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de poisson

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	amines aliphatiques
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000
TEEL-1 (mg/m3)	6 ppm
TEEL-2 (mg/m3)	40 ppm
TEEL-3 (mg/m3)	200 ppm

Ecotoxicity

DIMETHYLACETAMIDE

CAS Number: 127-19-5

> **Also known as:** ACETIC ACID, DIMETHYLAMIDE, DIMETHYL ACETAMIDE, N,N-DIMETHYLACETAMIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	127-19-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	87.14
Density of gas (kg/m3)	3.87
Boiling Point (°C)	164
Melting Point (°C)	-20
Vapour Pressure (Pa)	170 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	490
Flash Point (°C)	66
Upper explosivity limit (UEL) (volume %)	11.5

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur de poisson

Transportation data

Cargo group	10
State	liquide
Temperature (°C)	ambiante
Family name	amides

Reactivity data

Water	Oui
Acid(s)	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	300
TLV-TWA	10
TEEL-1 (mg/m3)	75 ppm
TEEL-2 (mg/m3)	300 ppm
TEEL-3 (mg/m3)	300 ppm

Ecotoxicity

DIMETHYLAMINE anhydre

UN Number: 1032 - CAS Number: 124-40-3

> **Also known as:** DMA, N-Methylmethanamine, Dimethylamine Solutions (40%), Solutions De Dimethylamine (40%)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1032
CAS number	124-40-3
Formula	C_2H_7N

Physical chemical data

Physical State (20°C)	Gaz
Physical State (25°C)	Liquid
Density (kg/m3)	2.064 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.8994 [cSt] at a temperature of 20°C
Molar mass (g/mol)	45.08
Density of gas (kg/m3)	2.064
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	51.5
Melting Point (°C)	-92
Vapour Pressure (Pa)	28708 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	400
Flash Point (°C)	-18
Lower explosivity limit (LEL) (volume %)	2.8
Upper explosivity limit (UEL) (volume %)	14.4

Behaviour at sea

Log kow	-0.38

Additional data

Colour	incolore
Odour	poisson pourri, ammoniaque

MARPOL pollution category	Category	Description
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	GD	

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	amines aliphatiques
IMO class	2(2.1)

Reactivity data

Water	Non
Abilities	Solution.
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2000	
Hazard statements	**Physical**	
	H224	Extremely flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Storage	
	P410 + P403	Protect from sunlight. Store in a well-ventilated place.
TLV-TWA	10	
ERPG-1 (ppm)	0.6	
ERPG-2 (ppm)	100	
ERPG-3 (ppm)	350	

Ecotoxicity

DIMETHYLAMINE solution aqueuse (40%)

UN Number: 1160 - CAS Number: 124-40-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1160
CAS number	124-40-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	45.1 (pure)
Density of gas (kg/m3)	2.06
Boiling Point (°C)	54
Melting Point (°C)	-37
Vapour Pressure (Pa)	28700 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	390
Flash Point (°C)	-18
Lower explosivity limit (LEL) (volume %)	2.6
Upper explosivity limit (UEL) (volume %)	12.3

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de poisson pourri
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Family name	amines aliphatiques

IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	500
ERPG-1 (ppm)	0.6
ERPG-2 (ppm)	100
ERPG-3 (ppm)	350

Ecotoxicity

DIMETHYLCYCLOHEXYLAMINE

UN Number: 2264

> **Also known as:** CYCLOHEXYLAMINE, N,N-DIMETHYL, n-DIMETHYLCYCLOHEXANAMINE, N,N-DIMETHYLCYCLOHEXYLAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2264

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	849 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	127.23
Density of gas (kg/m3)	5.68
Boiling Point (°C)	162
Melting Point (°C)	-60
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	215
Flash Point (°C)	42
Lower explosivity limit (LEL) (volume %)	3.6
Upper explosivity limit (UEL) (volume %)	19

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de musc et d'ammoniaque

Transportation data

Transport mode	Vrac,Colis
Package group	II
Temperature (°C)	ambiante
Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable

Human toxicity threshold

Ecotoxicity

DIMETHYLETHANOLAMINE

UN Number: 2051 - CAS Number: 108-01-0

> **Also known as:** DEANOL, 2-(DIMETHYLAMINO)ETHANOL, beta-DIMETHYLAMINOETHYLALCOHOL, N,N-DIMETHYL-N-(2-HYDROXYETHYL)AMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2051
CAS number	108-01-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	887 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	89.14
Density of gas (kg/m3)	4.13
Boiling Point (°C)	134.6
Melting Point (°C)	-58.6
Vapour Pressure (Pa)	< 700 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	295
Flash Point (°C)	41
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	11.9

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'amine

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide

Temperature (°C)	ambiante
Family name	alkanolamines

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Cu, Zn)
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	35 ppm
TEEL-2 (mg/m3)	150 ppm
TEEL-3 (mg/m3)	150 ppm

Ecotoxicity

DIMETHYLPOLYSILOXANE

Also known as: DIMETHICONE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	980 [Kg/m³] at a temperature of 20°C
Melting Point (°C)	-50
Flash Point (°C)	>110

Behaviour at sea

Additional data

Transportation data

State	liquide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	25
TEEL-2 (mg/m3)	150
TEEL-3 (mg/m3)	500

Ecotoxicity

DIMETHYLZINC

UN Number: 1370

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1370

Physical chemical data

Physical State (20°C)	Liquide
Boiling Point (°C)	-227

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	4.2

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

DINITROPHENOLS sec ou hydraté (< 15%mass. d'eau)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1683 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	184.1
Density of gas (kg/m3)	8.2

Behaviour at sea

Persistence (days)	3.1

Additional data

Colour	jaune
Odour	odeur de moisi

Transportation data

State	solide
Temperature (°C)	ambiante
IMO class	1.1 D

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Oui
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	0,65
TLV-TWA	0.03

Ecotoxicity

DINITROSOBENZENE

UN Number: 406

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	406

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1580 [Kg/m³] at a temperature of 20°C

Behaviour at sea

Additional data

Standard behavior classification	D, SD, S

Transportation data

State	solide
IMO class	1.3 C

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

DINITROTOLUENE solide

UN Number: 2038 - CAS Number: 25321-14-6

Also known as: DINITROPHENYL METHANE, DINITROTOLUOL, DNT

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2038
CAS number	25321-14-6

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1379 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	182.1
Density of gas (kg/m3)	8.09
Boiling Point (°C)	250
Melting Point (°C)	70
Ignition Temperature (°C)	400
Flash Point (°C)	212

Behaviour at sea

Additional data

Colour	jaune à rouge
Odour	odeur légère

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	26
TLV-TWA	0.2
TEEL-1 (mg/m3)	0.6
TEEL-2 (mg/m3)	12.5
TEEL-3 (mg/m3)	50

Ecotoxicity

DINITROTOLUENES fondu

UN Number: 2038 - CAS Number: 25321-14-6

Also known as: DNT

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2038
CAS number	25321-14-6

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1259/1379 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	182.13
Density of gas (kg/m3)	8.1
Boiling Point (°C)	decomp.
Melting Point (°C)	60/70
Flash Point (°C)	207

Behaviour at sea

Additional data

Colour	jaune à rouge
Odour	légère

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	42
State	liquide
Family name	composés nitro
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	0.6
TEEL-2 (mg/m3)	30
TEEL-3 (mg/m3)	50

Ecotoxicity

DINOSEB

UN Number: 2779

Also known as: DINOSEB, DNBP, ENT 1122

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2779

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1260 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	240.22
Melting Point (°C)	30/42
Flash Point (°C)	177

Behaviour at sea

Additional data

Colour	orange à brun

Transportation data

Package group	I/II/III
Cargo group	42
State	solide
Family name	composés nitro
IMO class	6.1

Reactivity data

Base(s)	Oui
Metal(s) and alloys	Oui (mild steel)

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	2.5
TEEL-2 (mg/m3)	4.5
TEEL-3 (mg/m3)	10

Ecotoxicity

DIOXANNE

UN Number: 1165 - CAS Number: 123-91-1

Also known as: DIOXANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1165
CAS number	123-91-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1036 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	88.11
Density of gas (kg/m3)	3.87
Boiling Point (°C)	101
Melting Point (°C)	10
Vapour Pressure (Pa)	4100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	375
Flash Point (°C)	12
Upper explosivity limit (UEL) (volume %)	22.5

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'alcool

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	41
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	éthers
IMO class	3.2

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2000
TLV-TWA	25
TEEL-1 (mg/m3)	17 ppm
TEEL-2 (mg/m3)	320 ppm
TEEL-3 (mg/m3)	760 ppm

Ecotoxicity

DIOXYDE DE DECYLOXYTETRAHYDROTHIOPHENE

Also known as: DECYLOXYTETRAHYDROTHIOPHENE DIOXIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1030 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	276
Boiling Point (°C)	> 150
Melting Point (°C)	< 10
Vapour Pressure (Pa)	< 10 [Pa] at a temperature of 20°C
Flash Point (°C)	130

Behaviour at sea

Additional data

Colour	jaune
Odour	inodore

Transportation data

State	liquide

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

DIOXYDE DE SOUFRE liquefié

UN Number: 1079

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1079

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.967 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	64.06
Density of gas (kg/m3)	2.967
Boiling Point (°C)	-10
Melting Point (°C)	-75
Vapour Pressure (Pa)	324160 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'oeufs pourris
Standard behavior classification	GD, G

Transportation data

Transport mode	Gaz,Colis
Ship type	1G
State	gas liquéfié
Temperature (°C)	< 54°
Pressure (Pa)	pressurisé
IMO class	2(2.3)

Reactivity data

Water	Oui
Acid(s)	Non

Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	100
ERPG-1 (ppm)	0.3
ERPG-3 (ppm)	15

Ecotoxicity

DIPENTENE

UN Number: 2052 - CAS Number: 138-86-3

Also known as: CAJEPUTENE, CINENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2052
CAS number	138-86-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	842 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	136.2
Density of gas (kg/m3)	6.321
Boiling Point (°C)	178
Melting Point (°C)	-156
Vapour Pressure (Pa)	133 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	237
Flash Point (°C)	45
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	6.1

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore à jaune clair
Odour	odeur agréable, de citron
Standard behavior classification	D, FD, F

Transportation data

Transport mode	Vrac,Colis
Package group	III

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	3.3

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	Ss - Skin Sensitization
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

DIPHENYLE

UN Number: 3077 - CAS Number: 92-52-4

Also known as: BIBENZENE, BIPHENYL, 1,1'-BIPHENYL, DIPHENYL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3077
CAS number	92-52-4

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	992 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	154.21
Density of gas (kg/m3)	6.85
Boiling Point (°C)	255
Melting Point (°C)	69/72
Ignition Temperature (°C)	540
Flash Point (°C)	113
Lower explosivity limit (LEL) (volume %)	0.6
Upper explosivity limit (UEL) (volume %)	5.8

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	caractéristique, aromatique

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	32
State	solide
Temperature (°C)	ambiante

Family name	hydrocarbures aromatiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

IDHL	15,6
TLV-TWA	0.2

Ecotoxicity

DIPROPYLAMINE

UN Number: 2383 - CAS Number: 142-84-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2383
CAS number	142-84-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	738 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	101.19
Density of gas (kg/m3)	4.386
Boiling Point (°C)	109
Melting Point (°C)	-100
Vapour Pressure (Pa)	4212 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	316
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	9.3

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur d'ammoniaque

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	amines aliphatiques
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	50
TEEL-2 (mg/m3)	350
TEEL-3 (mg/m3)	500

Ecotoxicity

DIPROPYLENE GLYCOL

CAS Number: 110-98-5

> **Also known as:** 2,2'-DIHYDROXYDIPROPYL ETHER, 2,2-DIHYDROXY ISOPROPYL ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	110-98-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1023 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	134.17
Density of gas (kg/m3)	2.103
Boiling Point (°C)	232
Melting Point (°C)	-30
Ignition Temperature (°C)	37
Flash Point (°C)	446
Lower explosivity limit (LEL) (volume %)	2.2
Upper explosivity limit (UEL) (volume %)	12.6

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	40
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	glycol éthers

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

DISULPHURE DE CARBONE

UN Number: 1131 - CAS Number: 75-15-0

> **Also known as:** CARBON BISULFIDE, CARBON BISULPHIDE, CARBON DISULPHIDE, Carbonbisulfide, Disulfure De Carbone

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1131
CAS number	75-15-0
Formula	CS_2

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1260 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.2874 [cSt] at a temperature of 20°C 0.279 [cSt] at a temperature of 25°C
Molar mass (g/mol)	76.14
Density of gas (kg/m3)	3.354
Solubility (g/L)	2000 [g/L] at a temperature of 20°C and salinity of 0‰ 2160 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	46
Melting Point (°C)	-110
Critical molar volume (m³/mol)	0.000173
Critical temperature (°C)	552
Critical pressure (Pa)	7900000
Surface tension (mN/m)	32.25 [mN/m] at a temperature of 20°C 31.58 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	40520 [Pa] at a temperature of 20°C 57328 [Pa] at a temperature of 30°C
Ignition Temperature (°C)	100
Flash Point (°C)	-30
Flash Point (Pensky-Martens closed cup) (°C)	-30
Lower explosivity limit (LEL) (volume %)	1.3

Upper explosivity limit (UEL) (volume %)	44
Vapor enthalpy (J/Kg)	352109 [J/Kg] at a temperature of 46°C 337667 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	17756763
Specific heat capacity (J/(Kg·K))	1003
Henry's constant (mol/(m³·Pa))	1459.1

Behaviour at sea

Persistence (days)	3.1
Log kow	1.84
Log koc	1.34
Biodegradation in estuary environment (Half-life) (days)	400

Additional data

Colour	incolore à jaune
Odour	odeur douce ou d'oeufs pourris

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Cargo group	38
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	disulfure de carbone
IMO class	3.1

Reactivity data

Base(s)	Oui
Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	3A - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	500	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H361	Suspected of damaging fertility or the unborn child.
	H372	Causes damage to organs through prolonged or repeated exposure, exposure cause the hazard:

Precautionary statements

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P270	Do no eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.

Response

P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice/attention.

ERPG-2 (ppm)	50
ERPG-3 (ppm)	500

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	2.1
Lowest median lethal concentration (LC50) on fishes (mg/l)	2.99
Highest no observed effect concentration (NOEC) on fishes (mg/l)	135
Assessment factor (AF)	1000 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	1 [µg/l] on the short term

DITHIOPYROPHOSPHATE DE TETRAETHYLE (solide, liquide ou en mélange)

UN Number: 1704

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1704

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1190 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	322.3

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non

Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.5
TEEL-2 (mg/m3)	3.5
TEEL-3 (mg/m3)	10

Ecotoxicity

Dodec-1-Ene

UN Number: 3295 - CAS Number: 112-41-4

> **Also known as:** Propylene Tetramer, Tetrapropylene, Dodecene, 1-Dodecene, Dodec-1-Ene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3295
CAS number	112-41-4
Formula	$C_{12}H_{24}$

Physical chemical data

Physical State (25°C)	Liquid
Kinematic viscosity (cSt)	1.18 [cSt] at a temperature of 20°C 1.5823 [cSt] at a temperature of 25°C
Molar mass (g/mol)	168.319
Solubility (g/L)	0.113 [g/L] at a temperature of 20°C and salinity of 0‰ 0.203 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	213.8
Melting Point (°C)	-35.2
Critical temperature (°C)	658
Critical pressure (Pa)	1930000
Surface tension (mN/m)	25.6 [mN/m] at a temperature of 20°C
Flash Point (Cleveland open cup) (°C)	79
Vapor enthalpy (J/Kg)	361100 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2143

Behaviour at sea

Log kow	6.1
Log koc	5.864
Bioconcentration factor (BCF)	310

Additional data

MARPOL pollution category	Category	Description
	X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	22
Lowest median lethal concentration (LC50) on crustacean (mg/l)	480
Lowest median lethal concentration (LC50) on fishes (mg/l)	> 1000
Assessment factor (AF)	1 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	1 [µg/l] on the short term

DODECANOL

CAS Number: 112-53-8

Also known as: DODECANOL, DODECYL ALCOHOL, 1-Dodecanol, Lauryl Alcohol, Alcool Dodecylique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-53-8
Formula	$C_{12}H_{26}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	831 [Kg/m³] at a temperature of 20°C 830.9 [Kg/m³] at a temperature of 24°C
Kinematic viscosity (cSt)	22.63 [cSt] at a temperature of 20°C
Molar mass (g/mol)	186.33
Solubility (g/L)	1.9 [g/L] at a temperature of 20°C and salinity of 0‰ 4 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	259
Melting Point (°C)	24
Critical temperature (°C)	719.4
Critical pressure (Pa)	1994000
Surface tension (mN/m)	29.4 [mN/m] at a temperature of 24°C
Ignition Temperature (°C)	275
Flash Point (°C)	127
Flash Point (Pensky-Martens closed cup) (°C)	127
Lower explosivity limit (LEL) (volume %)	0.6
Upper explosivity limit (UEL) (volume %)	5.1
Vapor enthalpy (J/Kg)	487297 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	39381108
Specific heat capacity (J/(Kg·K))	2351
Henry's constant (mol/(m³·Pa))	2.25

Behaviour at sea

Log kow	5.3
Log koc	2.63
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	48

Additional data

Colour	incolore	
Odour	douce	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	F/FE/E	

Transportation data

Cargo group	20
Temperature (°C)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating

Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Health**	
	H319	Causes serious eye irritation.
	Environmental	
	H400	Very toxic to aquatic life.
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P264	Wash ... thoroughly after handling.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P391	Collect spillage.
	Disposal	
	P501	Dispose of contents/container to ...
TEEL-2 (mg/m3)	7.5	
TEEL-3 (mg/m3)	500	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	0.97
Lowest median lethal concentration (LC50) on crustacean (mg/l)	320
Lowest median lethal concentration (LC50) on fishes (mg/l)	894
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.085
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1
Assessment factor (AF)	50 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	0 [µg/l] on the short term

DODECENE-1

UN Number: 2850 - CAS Number: 6842-15-5

Also known as: 1-DODECENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2850
CAS number	6842-15-5
Formula	$C_{12}H_{24}$

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	758 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.18 [cSt] at a temperature of 20°C 1.5823 [cSt] at a temperature of 25°C
Molar mass (g/mol)	168.31
Density of gas (kg/m3)	7.495
Solubility (g/L)	0.113 [g/L] at a temperature of 20°C and salinity of 0‰ 0.203 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	213
Melting Point (°C)	-32
Critical temperature (°C)	658
Critical pressure (Pa)	1930000
Surface tension (mN/m)	25.6 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	133 [Pa] at a temperature of 20°C 220 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	255
Flash Point (°C)	100
Flash Point (Cleveland open cup) (°C)	79
Lower explosivity limit (LEL) (volume %)	0.6
Vapor enthalpy (J/Kg)	361100 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2143

Behaviour at sea

Log kow	6.1
Log koc	5.864
Bioconcentration factor (BCF)	310

Additional data

Colour	incolore
Odour	odeur agréable

MARPOL pollution category

Category	Description
X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	22
Lowest median lethal concentration (LC50) on crustacean (mg/l)	480
Lowest median lethal concentration (LC50) on fishes (mg/l)	> 1000
Assessment factor (AF)	1 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	1 [µg/l] on the short term

DODECYL XYLENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Density (kg/m3)	880 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	274.49
Boiling Point (°C)	299
Vapour Pressure (Pa)	666 (21�C) [Pa] at a temperature of 20°C
Ignition Temperature (°C)	high
Flash Point (°C)	140

Behaviour at sea

Additional data

Standard behavior classification	FE

Transportation data

Cargo group	32
Family name	hydrocarbures aromatiques

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating

Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

Dodecylbenzene

CAS Number: 123-01-3

> **Also known as:** 1-Phenyldodecane, Laurylbenzene, Dodecylbenzene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	123-01-3
Formula	$C_{18}H_{30}$

Physical chemical data

Physical State (25°C)	Liquid
Molar mass (g/mol)	246.431
Solubility (g/L)	0.041 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	328
Melting Point (°C)	3
Flash Point (Pensky-Martens closed cup) (°C)	141
Vapor enthalpy (J/Kg)	351417 [J/Kg] at a temperature of 25°C
Henry's constant (mol/(m³·Pa))	91.1

Behaviour at sea

Log kow	5.7
Log koc	5.26
Bioconcentration factor (BCF)	35

Additional data

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.009
Lowest median lethal concentration (LC50) on fishes (mg/l)	796

DODECYLPHENOL

UN Number: 3145 - CAS Number: 27193-86-8

Also known as: p-DODECYLPHENOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3145
CAS number	27193-86-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	940 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	262.44
Boiling Point (°C)	154/168
Vapour Pressure (Pa)	0.005 (25°C) [Pa] at a temperature of 20°C
Flash Point (°C)	163

Behaviour at sea

Additional data

Colour	couleur paille
Odour	odeur pheNonlique
Marine pollutant	P

Transportation data

Transport mode	Vrac,Colis
Package group	I/II/III
Cargo group	21
Temperature (°C)	ambiante
Family name	phénols, crésols

Reactivity data

Water	Non

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	25
TEEL-2 (mg/m3)	150
TEEL-3 (mg/m3)	500

Ecotoxicity

DOWTHERM

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1060 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	166
Density of gas (kg/m3)	6.837
Boiling Point (°C)	257
Melting Point (°C)	12
Vapour Pressure (Pa)	650 [Pa] at a temperature of 20°C
Flash Point (°C)	401
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	3.3

Behaviour at sea

Additional data

Colour	brun clair à brun foncé
Odour	odeur parfumée
Standard behavior classification	D, SD, S

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ENDRINE

UN Number: 2761

> **Also known as:** ENDREX, ENDRIN, ENDRINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2761

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1650 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	380.82
Melting Point (°C)	177
Lower explosivity limit (LEL) (volume %)	1.1

Behaviour at sea

Persistence (days)	3.1

Additional data

Colour	incolore à marron
Odour	inodore
Marine pollutant	P

Transportation data

Transport mode	Vrac,Colis
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	125
TLV-TWA	0.006
TEEL-1 (mg/m3)	0.3

Ecotoxicity

EPICHLORHYDRINE

UN Number: 2023 - CAS Number: 106-89-8

> **Also known as:** 1-CHLORO-2,3-EPOXYPROPANE, 3-CHLORO-1,2-EPOXYPROPANE, 2-(CHLOROMETHYL)-OXIRANE, CHLOROMETHYLOXIRANE, CHLOROPROPYLENE OXIDE, EPICHLOROHYDRIN, 1,2-Epoxy-3-Chloropropane, 2-(Chloromethyl)Oxirane, 3-Chloro-1,2-Propylene Oxide, Alpha-Epichlorohydrin, Ech, Epichlorohydrine, Epichlorhydrine, α-Epichlorohydrin

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2023
CAS number	106-89-8
Formula	C_3H_5ClO

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1180 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.87 [cSt] at a temperature of 20°C 0.91 [cSt] at a temperature of 25°C
Molar mass (g/mol)	92.53
Density of gas (kg/m3)	4.244
Solubility (g/L)	64000 [g/L] at a temperature of 20°C and salinity of 0‰ 65900 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	115.4
Melting Point (°C)	-48
Critical molar volume (m³/mol)	0.000168
Surface tension (mN/m)	37 [mN/m] at a temperature of 20°C 36.36 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	1730 [Pa] at a temperature of 20°C 2200 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	416
Flash Point (°C)	34
Flash Point (Pensky-Martens closed cup) (°C)	31
Flash Point (Cleveland open cup) (°C)	37.8
Lower explosivity limit (LEL) (volume %)	3.8

Upper explosivity limit (UEL) (volume %)	21
Vapor enthalpy (J/Kg)	410000 [J/Kg] at a temperature of 115°C
Combus enthalpy (J/Kg)	17700000
Specific heat capacity (J/(Kg·K))	1422
Combustion efficiency (%)	55
Mass flow rate of the combustion surface (Kg/(m²·s))	0.04
Rad fraction (%)	35
Henry's constant (mol/(m³·Pa))	2.8

Behaviour at sea

Log kow	0.26
Log koc	1.85
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	0.66

Additional data

Colour	incolore
Odour	odeur douce, d'aïl

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	II
Cargo group	17
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	épichlorohydrines
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui

Oxidizing agents	Oui
Notable risks	Violent reactions. On combustion, forms toxic and corrosive fumes.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3A - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	250	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H317	May cause an allergic skin reaction.
	H331	Toxic if inhaled.
	H350	May cause cancer.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	Disposal	
	P501	Dispose of contents/container to ...
ERPG-2 (ppm)	20	
ERPG-3 (ppm)	100	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	24.2
Lowest median lethal concentration (LC50) on crustacean (mg/l)	8.87
Lowest median lethal concentration (LC50) on fishes (mg/l)	0.65
Highest no observed effect concentration (NOEC) on algae (mg/l)	10.7
Assessment factor (AF)	1000 on the short term 5000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	0.65 [µg/l] on the short term 0.13 [µg/l] on the long term

ESSENCE (pour moteurs d'automobiles)

UN Number: 1203

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1203

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	732 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	14 /71
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	250
Flash Point (°C)	-18
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	8.7

Behaviour at sea

Additional data

Colour	incolore à brun, violet
Odour	odeur d'essence
Standard behavior classification	E, FE, F

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.1

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	500 ppm
TEEL-2 (mg/m3)	500 ppm
TEEL-3 (mg/m3)	1500 ppm

Ecotoxicity

Ester Methylique D'Acide Gras

Also known as: Fame, Fatty Acid Methyl Esters, Ester Methylique D'Acide Gras

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Formula	$CH_3(CH_2)nCOOCH_3$

Physical chemical data

Physical State (25°C)	Liquid
Mixed	Yes
Kinematic viscosity (cSt)	4.5 [cSt] at a temperature of 20°C
Solubility (g/L)	0 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	302
Melting Point (°C)	-12

Behaviour at sea

Additional data

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

Predicted No Effect Concentration (PNEC) (µg/l)	0.2504 [µg/l] on the short term

ETHANE (gaz comprimé)

UN Number: 1035

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1035

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.342 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	30.07
Density of gas (kg/m3)	1.342
Boiling Point (°C)	-8.4
Melting Point (°C)	-183
Vapour Pressure (Pa)	3850000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	515
Lower explosivity limit (LEL) (volume %)	2.9
Upper explosivity limit (UEL) (volume %)	13

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur d'essence

Transportation data

Transport mode	Gaz,Colis
Cargo group	31
State	liq.compr.gas
Temperature (°C)	-89°
Pressure (Pa)	pressurisé
Family name	paraffines
IMO class	2(2.1)

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	3000 ppm
TEEL-2 (mg/m3)	5000 ppm
TEEL-3 (mg/m3)	25000 ppm

Ecotoxicity

ETHANE (liquide réfrigéré)

UN Number: 1961

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1961

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.342 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	30.07
Density of gas (kg/m3)	1.342
Boiling Point (°C)	-8.4
Melting Point (°C)	-183
Vapour Pressure (Pa)	3850000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	515
Lower explosivity limit (LEL) (volume %)	2.9
Upper explosivity limit (UEL) (volume %)	13.1

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur d'essence

Transportation data

Transport mode	Gaz,Colis
Ship type	2G
Cargo group	31
State	liquefied gas
Temperature (°C)	-89°
Pressure (Pa)	pressurisé
Family name	paraffines
IMO class	2(2.1)

Reactivity data

Water	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	3001 ppm
TEEL-2 (mg/m3)	5001 ppm
TEEL-3 (mg/m3)	25001 ppm

Ecotoxicity

ETHANOL

UN Number: 1170 - CAS Number: 64-17-5

> **Also known as:** ABSOLUTE ALCOHOL, AETHANOL, ALCOHOL, ALGRAIN, ANHYDOL, COLOGNE SPIRIT, ETHANOL 200 PROOF, Anhydrous Ethanol, Ethanol Denatured, Ethyl Alcohol, Ethyl Hydrate, Ethyl Hydroxide, Fermentation Alcohol, Grain Alcohol, 1-Hydroxyethane, Methyl Carbinol, Ethyl Alcohol Anhydrous, Absolute Ethanol, Alcohol, Anhydrous, Denaturated Ethanol, Ethanol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1170
CAS number	64-17-5
Formula	C_2H_6O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	790 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.51 [cSt] at a temperature of 20°C 1.36 [cSt] at a temperature of 25°C
Molar mass (g/mol)	46.07
Density of gas (kg/m3)	2.064
Solubility (g/L)	790000 [g/L] at a temperature of 20°C and salinity of 0‰ 790000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	78.5
Melting Point (°C)	-81
Critical molar volume (m³/mol)	0.000168
Critical temperature (°C)	514
Critical pressure (Pa)	6137000
Surface tension (mN/m)	22.4 [mN/m] at a temperature of 20°C 21.97 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	5875 [Pa] at a temperature of 20°C 7906 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	425
Flash Point (°C)	19
Flash Point (Pensky-Martens closed cup) (°C)	13

Lower explosivity limit (LEL) (volume %)	3.3
Upper explosivity limit (UEL) (volume %)	19
Vapor enthalpy (J/Kg)	794009 [J/Kg] at a temperature of 78.3°C 918602 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	26800000
Specific heat capacity (J/(Kg·K))	2437.6
Combustion efficiency (%)	99
Mass flow rate of the combustion surface (Kg/(m²·s))	0.03
Rad fraction (%)	40
Henry's constant (mol/(m³·Pa))	0.5

Behaviour at sea

Log kow	-0.32
Log koc	1.27
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	3.16

Additional data

Colour	incolore	
Odour	odeur d'alcool	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	II/III
Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols
IMO class	3.2/3.3

Reactivity data

Abilities	Miscible in water.
Acid(s)	Oui

Base(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	3300	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H319	Causes serious eye irritation.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P264	Wash ... thoroughly after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	1000
TEEL-1 (mg/m3)	3000 ppm
TEEL-2 (mg/m3)	3300 ppm
TEEL-3 (mg/m3)	3300 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	1000
Lowest median lethal concentration (LC50) on crustacean (mg/l)	695
Lowest median lethal concentration (LC50) on fishes (mg/l)	11200
Highest no observed effect concentration (NOEC) on algae (mg/l)	280
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	9.6
Assessment factor (AF)	500 on the short term 500 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1390 [µg/l] on the short term 19.2 [µg/l] on the long term

ETHANOLAMINE pur ou en solution

UN Number: 2491 - CAS Number: 141-43-5

> **Also known as:** 2-AMINOETHANOL, beta-AMINO ETHYL ALCOHOL, COLAMINE, beta-ETHANOL AMINE, 2-Aminoethol, β-Aminoethyl Alcohol, Ethyloamine, β-Hydroxyethylamine, Monoethanolamine, Mea, Ethanolamine, Beta-Aminoethyl Alcohol, Beta-Hydroxyethylamine

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2491
CAS number	141-43-5
Formula	C_2H_7NO

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1016 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	18.61 [cSt] at a temperature of 25°C
Molar mass (g/mol)	61.08
Density of gas (kg/m3)	2.709
Solubility (g/L)	100000 [g/L] at a temperature of 20°C and salinity of 0‰ 100000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	170
Melting Point (°C)	10
Critical temperature (°C)	671
Critical pressure (Pa)	8000000
Surface tension (mN/m)	48.32 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	64 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	410
Flash Point (°C)	85
Flash Point (Pensky-Martens closed cup) (°C)	86
Lower explosivity limit (LEL) (volume %)	5.5
Upper explosivity limit (UEL) (volume %)	17
Vapor enthalpy (J/Kg)	815775 [J/Kg] at a temperature of 171°C
Combus enthalpy (J/Kg)	24900000

Specific heat capacity (J/(Kg·K))	3201
Henry's constant (mol/(m³·Pa))	0.003

Behaviour at sea

Log kow	-1.31
Log koc	0.07
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3.2

Additional data

Colour	incolore
Odour	légère odeur d'ammoniaque

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alkanolamines

Reactivity data

Water	Non
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000

Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000	
Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P273	Avoid release to the environment.
	Disposal	
	P501	Dispose of contents/container to ...
TEEL-1 (mg/m3)	6 ppm	
TEEL-2 (mg/m3)	30 ppm	
TEEL-3 (mg/m3)	30 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	140
Lowest median lethal concentration (LC50) on fishes (mg/l)	150
Highest no observed effect concentration (NOEC) on algae (mg/l)	1
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.85
Highest no observed effect concentration (NOEC) on fishes (mg/l)	1.24

Assessment factor (AF)	100 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	9 [µg/l] on the short term

ETHER 2,2'-DICHLOROISOPROPYLIQUE

UN Number: 2490

> **Also known as:** BIS,(2-CHLOROISOPROPYL)ETHER, di-(2-CHLOROISPROPYL)ETHER, 2,2'-DICHLOROISOPROPYL ETHER, 2,2'-DICHLOROISOPROPYL ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2490

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1112 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	171.07
Density of gas (kg/m3)	7.6
Boiling Point (°C)	187.3
Melting Point (°C)	1.051652893
Vapour Pressure (Pa)	< 200 [Pa] at a temperature of 20°C
Flash Point (°C)	77

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	SD

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures halogénés

IMO class	6.1

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable

Human toxicity threshold

TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	75 ppm
TEEL-3 (mg/m3)	350 ppm

Ecotoxicity

ETHER DI-n-BUTYLIQUE DE DIETHYLENEGLYCOL

CAS Number: 112-73-2

> **Also known as:** BIS(2-BUTOXYETHYL)ETHER, BUTYLDIGLYME, 2,2'-DIBUTOXYETHYL ETHER, DIBUTYL CARBITOL, DIETHYLENE GLYCOL DI-n-BUTYL ETHER, DIETHYLENE GLYCOL DIBUTYL ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-73-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	885 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	218.34
Density of gas (kg/m3)	> 1.29
Boiling Point (°C)	256
Melting Point (°C)	-60
Flash Point (°C)	48

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique
Standard behavior classification	F/FD/D

Transportation data

Cargo group	40
State	liquide
Temperature (°C)	ambiante
Family name	glycol éthers

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

ETHER DIBUTYLIQUE

UN Number: 1149 - CAS Number: 111-92-2

> **Also known as:** BUTYL ETHER, n-BUTYL ETHER, DI-n-BUTYL ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1149
CAS number	111-92-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.2
Density of gas (kg/m3)	5.805
Boiling Point (°C)	142
Melting Point (°C)	-95
Vapour Pressure (Pa)	600 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	175
Flash Point (°C)	22
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	8.5

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	FE

Transportation data

Package group	III
Cargo group	41
State	liquide

Family name	éthers
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	3 ppm
TEEL-2 (mg/m3)	20 ppm
TEEL-3 (mg/m3)	400 ppm

Ecotoxicity

ETHER DICHLORO-2,2 DIETHYLIQUE

UN Number: 1916

Also known as: DICHLOROETHYLETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1916

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1220 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	143
Density of gas (kg/m3)	1.548
Boiling Point (°C)	178
Melting Point (°C)	-52
Vapour Pressure (Pa)	1100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	370
Flash Point (°C)	55

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce et agréable

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	41
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	éthers

IMO class	6.1

Reactivity data

Acid(s)	Oui

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable

Human toxicity threshold

IDHL	250
TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	25.7 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

ETHER DIETHYLIQUE DE DIETHYLENEGLYCOL

CAS Number: 112-36-7

> **Also known as:** DETHYL CARBITOL, DIETHYLENE GLYCOL DIETHYL ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-36-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	162.2
Density of gas (kg/m3)	7.22
Boiling Point (°C)	188
Melting Point (°C)	-44
Vapour Pressure (Pa)	70 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	205
Flash Point (°C)	82

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	40
State	liquide
Family name	glycol éthers

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	250
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

ETHER DIISOPROPYL IQUE

UN Number: 1159 - CAS Number: 108-20-3

> **Also known as:** DIISOPROPYL ETHER, DIISOPROPYL OXIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1159
CAS number	108-20-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	724 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.2
Density of gas (kg/m3)	7.095
Boiling Point (°C)	68
Melting Point (°C)	-86
Vapour Pressure (Pa)	18000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	435
Flash Point (°C)	-28
Upper explosivity limit (UEL) (volume %)	21

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	41
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	10000
TLV-TWA	500
TEEL-1 (mg/m3)	310 ppm
TEEL-2 (mg/m3)	310 ppm
TEEL-3 (mg/m3)	1400 ppm

Ecotoxicity

ETHER DIPHENYLIQUE

UN Number: 3082 - CAS Number: 101-84-8

> **Also known as:** BIPHENYL OXIDE, DIPHENYL ETHER, DIPHENYL ETHER, DIPHENYL OXIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	101-84-8

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1070 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	170.2
Density of gas (kg/m3)	7.482
Boiling Point (°C)	257
Melting Point (°C)	27
Ignition Temperature (°C)	610
Flash Point (°C)	115
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	1.5

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce et agréable

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	2 ppm
TEEL-2 (mg/m3)	20 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

ETHER ETHYLIQUE

UN Number: 1155 - CAS Number: 60-29-7

> **Also known as:** DIETHYL ETHER, DIETHYL OXIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1155
CAS number	60-29-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	714 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	74.12
Density of gas (kg/m3)	3.35
Boiling Point (°C)	34.8
Melting Point (°C)	-116
Vapour Pressure (Pa)	59000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	170
Flash Point (°C)	-45
Lower explosivity limit (LEL) (volume %)	1.85
Upper explosivity limit (UEL) (volume %)	36.5

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	ED

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
IMO class	3.1

Reactivity data

Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	19000
TLV-TWA	400
TEEL-1 (mg/m3)	500 ppm
TEEL-2 (mg/m3)	500 ppm
TEEL-3 (mg/m3)	1900 ppm

Ecotoxicity

ETHER ETHYLVINYLIQUE stabilisé

UN Number: 1302 - CAS Number: 109-92-2

> **Also known as:** Ethoxyethylene, Ethyl Vinyl Ether, Vinyl Ethyl Ether, Ether Etyhlique De Vinyle

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1302
CAS number	109-92-2
Formula	C_4H_8O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	759 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	72.1
Density of gas (kg/m3)	3.225
Solubility (g/L)	10000 [g/L] at a temperature of 37°C and salinity of 0‰
Boiling Point (°C)	35.6
Melting Point (°C)	-115
Vapour Pressure (Pa)	58900 [Pa] at a temperature of 20°C 68128 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	201
Flash Point (°C)	< 10
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	28
Henry's constant (mol/(m³·Pa))	547

Behaviour at sea

Log kow	1.04
Log koc	0.99

Additional data

Colour	incolore

Odour	caractéristique, désagréable

MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
State	liquide
Family name	éthers
IMO class	3.1

Reactivity data

Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Environmental**	
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

TEEL-1 (mg/m3)	50 ppm
TEEL-2 (mg/m3)	350 ppm
TEEL-3 (mg/m3)	1500 ppm

Ecotoxicity

ETHER METHYL tert-BUTYLIQUE

UN Number: 2398 - CAS Number: 1634-04-4

> **Also known as:** Tert-Butyl Methyl Ether, 2-Methoxy-2-Methyl Propane, Methyl T-Butyl Ether, Methyl-Tert-Butyl Ether, Methyl Tertiary Butyl Ether, Methyl 1,1-Dimethylethyl Ether, 2-Methyl-2-Methoxypropane, Mtbe, Methyl Butyl Ether, Methyl Tert-Butyl Ether, Methyl-Tertio-Butyl-Ether

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2398
CAS number	1634-04-4
Formula	$C_5H_{12}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	740.5 [Kg/m³] at a temperature of 20°C
	757.4 [Kg/m³] at a temperature of 5°C
	752.7 [Kg/m³] at a temperature of 10°C
	753.1 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.47 [cSt] at a temperature of 20°C
	1.756 [cSt] at a temperature of 5°C
	1.7537 [cSt] at a temperature of 10°C
	1.5137 [cSt] at a temperature of 20°C
Molar mass (g/mol)	88.15
Density of gas (kg/m3)	3.87
Solubility (g/L)	48000 [g/L] at a temperature of 20°C and salinity of 0‰
	31780 [g/L] at a temperature of 20°C and salinity of 0‰
	26870 [g/L] at a temperature of 20°C and salinity of 5‰
	20550 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	55.2
Melting Point (°C)	-109
Critical temperature (°C)	467.1
Critical pressure (Pa)	3430000

Surface tension (mN/m)	20 [mN/m] at a temperature of 20°C 18.3 [mN/m] at a temperature of 25°C 20.04 [mN/m] at a temperature of 5°C 25.02 [mN/m] at a temperature of 10.1°C 18.06 [mN/m] at a temperature of 18.5°C
Vapour Pressure (Pa)	310 [Pa] at a temperature of 20°C 33000 [Pa] at a temperature of 25°C
Flash Point (°C)	-26
Flash Point (Pensky-Martens closed cup) (°C)	-28.2
Lower explosivity limit (LEL) (volume %)	1.26
Upper explosivity limit (UEL) (volume %)	8.4
Vapor enthalpy (J/Kg)	316960 [J/Kg] at a temperature of 55.25°C 338287 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	35300000
Specific heat capacity (J/(Kg·K))	2127
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.04
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	43.8

Behaviour at sea

Log kow	1.06
Log koc	1.05
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	1.5

Additional data

MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FED	

Transportation data

Package group	II
Cargo group	41
State	liquide
IMO class	3.1

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H315	Causes skin irritation.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	Storage	
	P403 + P235	Store in a well-ventilated place. Keep cool.
TLV-TWA	40	
TEEL-1 (mg/m3)	50 ppm	
TEEL-2 (mg/m3)	570 ppm	

TEEL-3 (mg/m3)	5300 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	184
Lowest median lethal concentration (LC50) on crustacean (mg/l)	136
Lowest median lethal concentration (LC50) on fishes (mg/l)	574
Highest no observed effect concentration (NOEC) on algae (mg/l)	103
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	26
Highest no observed effect concentration (NOEC) on fishes (mg/l)	293.5
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1360 [µg/l] on the short term 260 [µg/l] on the long term

Ether Methylbutylique De L'Ethylene Glycol

CAS Number: 13343-98-1

> **Also known as:** 2,5-Dioxanonane, Butyl 2-Methoxyethyl Ether, 1-(2-Methoxyethoxy)Butane, 1-Butoxy-2-Methoxy-Ethane, Ethylene Glycol Methyl Butyl Ether, Ether Methylbutylique De L'Ethylene Glycol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	13343-98-1
Formula	$C_7H_{16}O_2$

Physical chemical data

Physical State (25°C)	Liquid
Molar mass (g/mol)	132.20284
Boiling Point (°C)	147
Henry's constant (mol/(m³·Pa))	3.03

Behaviour at sea

Log kow	1.27
Log koc	0.442
Bioconcentration factor (BCF)	1.883

Additional data

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

Ether Methylique De Propylene Glycol

UN Number: 3092 - CAS Number: 107-98-2

> **Also known as:** 1,2-Propylene Glycol Monomethyl Ether, 1-Methoxy-2-Propanol, Propylene Glycol Methyl Ether, Ether Methylique De Propylene Glycol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3092
CAS number	107-98-2
Formula	$C_4H_{10}O_2$

Physical chemical data

Physical State (25°C)	Liquid
Kinematic viscosity (cSt)	1.88 [cSt] at a temperature of 20°C 1.86 [cSt] at a temperature of 25°C
Molar mass (g/mol)	90.121
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	119
Melting Point (°C)	-95
Critical temperature (°C)	579.8
Critical pressure (Pa)	4113000
Surface tension (mN/m)	27.27 [mN/m] at a temperature of 20°C
Flash Point (Pensky-Martens closed cup) (°C)	32
Flash Point (Cleveland open cup) (°C)	36
Combus enthalpy (J/Kg)	25857120
Specific heat capacity (J/(Kg·K))	2426
Henry's constant (mol/(m³·Pa))	0.09

Behaviour at sea

Log kow	-0.49
Log koc	0
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3.2

Additional data

MARPOL pollution category	Category	Description
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

Abilities	Miscible in water.

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H336	May cause drowsiness or dizziness.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	Response	
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P235	Store in a well-ventilated place. Keep cool.
	Disposal	
	P501	Dispose of contents/container to ...

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	23300
Assessment factor (AF)	100 on the short term

Predicted No Effect Concentration (PNEC) (µg/l)	208000 [µg/l] on the short term

ETHER METHYLIQUE DU PROPYLENE GLYCOL

UN Number: 3092 - CAS Number: 107-98-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3092
CAS number	107-98-2
Formula	$C_4H_{10}O_2$

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	924 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.88 [cSt] at a temperature of 20°C 1.86 [cSt] at a temperature of 25°C
Molar mass (g/mol)	90.12
Density of gas (kg/m3)	3.999
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	121
Melting Point (°C)	-97
Critical temperature (°C)	579.8
Critical pressure (Pa)	4113000
Surface tension (mN/m)	27.27 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	1460 [Pa] at a temperature of 20°C 1665 [Pa] at a temperature of 25°C
Flash Point (°C)	38
Flash Point (Pensky-Martens closed cup) (°C)	32
Flash Point (Cleveland open cup) (°C)	36
Combus enthalpy (J/Kg)	25857120
Specific heat capacity (J/(Kg·K))	2426
Henry's constant (mol/(m³·Pa))	0.09

Behaviour at sea

Log kow	-0.49

Log koc	0
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3.2

Additional data

Colour	incolore
Odour	odeur douce

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

TLV-TWA	100
TEEL-1 (mg/m3)	150 ppm
TEEL-2 (mg/m3)	300 ppm
TEEL-3 (mg/m3)	750 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	23300
Assessment factor (AF)	100 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	208000 [µg/l] on the short term

ETHER MONOETHYLIQUE DE L'ETHYLENE GLYCOL

UN Number: 1171 - CAS Number: 110-80-5

Also known as: CELLOSOLVE, CELLOSOLVE SOLVENT, DOWANOL EE, EKTASOLVE EE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1171
CAS number	110-80-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	931 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	90.12
Density of gas (kg/m3)	3.87
Boiling Point (°C)	135.1
Melting Point (°C)	-69.4
Vapour Pressure (Pa)	503 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	235
Flash Point (°C)	40
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	15.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur éthylique

Transportation data

Package group	III
Cargo group	40

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	glycol éthers
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Cu)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	500
TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	500 ppm
TEEL-3 (mg/m3)	500 ppm

Ecotoxicity

ETHER MONOMETHYLIQUE DE L'ETHYLENE GLYCOL

UN Number: 1188 - CAS Number: 109-86-4

> **Also known as:** DOWANOL EM, ECME, EGM, 2-Methoxyethanol, Methyl Cellosolve, Methyl Oxitol, Methylglycol, Ethylene Glycol Monomethyl Ether, Ether Monomethylique De L'Ethylene Glycol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1188
CAS number	109-86-4
Formula	$C_3H_8O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	966 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	76.1
Density of gas (kg/m3)	5.289
Solubility (g/L)	1000000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	124.7
Melting Point (°C)	-85
Critical molar volume (m³/mol)	0.000263
Critical temperature (°C)	597.6
Critical pressure (Pa)	5285000
Surface tension (mN/m)	30.84 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	505 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	285
Flash Point (°C)	37
Flash Point (Pensky-Martens closed cup) (°C)	42
Lower explosivity limit (LEL) (volume %)	2.5
Upper explosivity limit (UEL) (volume %)	19.8
Vapor enthalpy (J/Kg)	493331 [J/Kg] at a temperature of 124.1°C 593600 [J/Kg] at a temperature of 25°C

Combus enthalpy (J/Kg)	21980699
Specific heat capacity (J/(Kg·K))	2249
Henry's constant (mol/(m³·Pa))	0.033

Behaviour at sea

Log kow	-0.77
Log koc	0
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3

Additional data

Colour	incolore
Odour	inodore

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	40
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	glycol éthers
IMO class	3.3

Reactivity data

Abilities	Miscible in water.
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	2000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H332	Harmful if inhaled.
	H360	May damage fertility or the unborn child.
Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	P270	Do no eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P281	Use personal protective equipment as required.
	Response	

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P322	Specific measures (see ... on this label).
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use ... for extinction.

Storage

P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal

P501	Dispose of contents/container to ...

TLV-TWA	25
TEEL-1 (mg/m3)	0.35 ppm
TEEL-2 (mg/m3)	2.5 ppm
TEEL-3 (mg/m3)	200 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	1000
Lowest median lethal concentration (LC50) on fishes (mg/l)	> 10000
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	1000 [µg/l] on the short term

ETHER MONOMETHYLIQUE DU DIETHYLENE GLYCOL

Also known as: DIETHYLENE GLYCOL MONOMETHYL ETHER, DIGLYCOL MONOMETHYL ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	9900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	134.2
Density of gas (kg/m3)	5.934
Boiling Point (°C)	194
Melting Point (°C)	-65
Vapour Pressure (Pa)	13 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	215
Flash Point (°C)	91
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	16.1

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur agréable

Transportation data

Cargo group	40
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	glycol éthers

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.35 ppm
TEEL-2 (mg/m3)	0.35 ppm
TEEL-3 (mg/m3)	0.35 ppm

Ecotoxicity

ETHER PHENYLIQUE DE L'ETHYLENEGLYCOL

CAS Number: 122-99-6

Also known as: AROSOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	122-99-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	138.2
Density of gas (kg/m3)	6.19
Boiling Point (°C)	242
Melting Point (°C)	14
Vapour Pressure (Pa)	5200 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	500
Flash Point (°C)	121

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique, agréable

Transportation data

Cargo group	40
Temperature (°C)	ambiante
Family name	glycol éthers

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	20 ppm
TEEL-2 (mg/m3)	20 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

ETHOPROPHOS

UN Number: 3018

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3018

Physical chemical data

Physical State (20°C)	Liquide
Molar mass (g/mol)	254.31
Boiling Point (°C)	90
Melting Point (°C)	-13
Vapour Pressure (Pa)	0.046 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	jaune pâle

Transportation data

Package group	I/II/III
IMO class	6.1

Reactivity data

Water	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.75
TEEL-3 (mg/m3)	15

Ecotoxicity

ETHYL-2 HEXANOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	834 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.23
Density of gas (kg/m3)	5.79
Boiling Point (°C)	184.9
Melting Point (°C)	< -76
Ignition Temperature (°C)	231
Flash Point (°C)	73
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	7.4

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur légère

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

ERPG-1 (ppm)	0.1
ERPG-2 (ppm)	100
ERPG-3 (ppm)	200

Ecotoxicity

ETHYLAMINE

UN Number: 1036 - CAS Number: 75-04-7

Also known as: AMINOETHANE, ETHANAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1036
CAS number	75-04-7

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.064 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	45.1
Density of gas (kg/m3)	2.064
Boiling Point (°C)	16.7
Melting Point (°C)	-81
Vapour Pressure (Pa)	120000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	335
Flash Point (°C)	-49
Lower explosivity limit (LEL) (volume %)	3.5
Upper explosivity limit (UEL) (volume %)	14

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur forte d'ammoniac
Standard behavior classification	GD

Transportation data

Transport mode	Vrac,Gaz,Colis
State	liq.compr.gas
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	amines aliphatiques
IMO class	2(2.1)

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	GD - Gas/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	4000
TLV-TWA	10
TEEL-1 (mg/m3)	7.5 ppm
TEEL-2 (mg/m3)	49 ppm
TEEL-3 (mg/m3)	270 ppm

Ecotoxicity

ETHYLAMINE en solution (< 72%)

UN Number: 2270

Also known as: AMINOETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2270

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	687 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	45.1
Density of gas (kg/m3)	1.935
Boiling Point (°C)	16.5
Melting Point (°C)	-81
Vapour Pressure (Pa)	154000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	384
Flash Point (°C)	-18
Lower explosivity limit (LEL) (volume %)	3.5
Upper explosivity limit (UEL) (volume %)	14

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur ammoniacale
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis (sol.)
Ship type	2 (sol.)
Package group	II (sol.)
Cargo group	7 (sol.)

State	liquide
Temperature (°C)	ambiante
Family name	alcools, glycols
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	600
TEEL-1 (mg/m3)	7.5 ppm
TEEL-2 (mg/m3)	49 ppm
TEEL-3 (mg/m3)	270 ppm

Ecotoxicity

ETHYLAMYLCETONE

UN Number: 2271 - CAS Number: 106-68-3

Also known as: AMYL ETHYL KETONE, EAK

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2271
CAS number	106-68-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	822 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	128.22
Density of gas (kg/m3)	5.68
Boiling Point (°C)	160
Melting Point (°C)	-56.7
Vapour Pressure (Pa)	270 [Pa] at a temperature of 20°C
Flash Point (°C)	46

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur fruitée
Standard behavior classification	FD

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	18
Temperature (°C)	ambiante
Family name	esters
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	25
TEEL-1 (mg/m3)	25 ppm
TEEL-2 (mg/m3)	25 ppm
TEEL-3 (mg/m3)	100 ppm

Ecotoxicity

ETHYLBENZENE

UN Number: 1175 - CAS Number: 100-41-4

Also known as: Ethyl Benzene, Ethylbenzol, Eb, Phenylethane, Ethylbenzene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1175
CAS number	100-41-4
Formula	C_8H_{10}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	867 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.77 [cSt] at a temperature of 20°C 0.73151 [cSt] at a temperature of 25°C
Molar mass (g/mol)	106.17
Density of gas (kg/m3)	3.773
Solubility (g/L)	152 [g/L] at a temperature of 20°C and salinity of 0‰ 160 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	136.4
Melting Point (°C)	-95
Critical molar volume (m³/mol)	0.000374
Critical temperature (°C)	617.5
Critical pressure (Pa)	3609000
Surface tension (mN/m)	29.2 [mN/m] at a temperature of 20°C 28.75 [mN/m] at a temperature of 25°C
Interfacial tension (mN/m)	35.48 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	930 [Pa] at a temperature of 20°C 1270 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	430
Flash Point (°C)	15
Flash Point (Pensky-Martens closed cup) (°C)	21
Flash Point (Cleveland open cup) (°C)	26.7

Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	6.7
Vapor enthalpy (J/Kg)	335029 [J/Kg] at a temperature of 136.2°C 397853 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	40900000
Specific heat capacity (J/(Kg·K))	1725.5
Combustion efficiency (%)	70
Mass flow rate of the combustion surface (Kg/(m²·s))	0.07
Rad fraction (%)	60
Henry's constant (mol/(m³·Pa))	798

Behaviour at sea

Persistence (days)	0.8
Log kow	3.13
Log koc	2.38
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	91

Additional data

Colour	incolore	
Odour	odeur douce, d'essence	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FE	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	32
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	hydrocarbures aromatiques
IMO class	3.2

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	T - Specific Target Organ Toxicity following single or repeated exposure
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H332	Harmful if inhaled.
	H373	May cause damage to organs through prolonged or repeated exposure, exposure cause the hazard:
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P240	Ground/bond container and receiving equipment.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P331	Do NOT induce vomiting.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	100	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	3.6
Lowest median lethal concentration (LC50) on crustacean (mg/l)	1.8
Lowest median lethal concentration (LC50) on fishes (mg/l)	4.2
Highest no observed effect concentration (NOEC) on algae (mg/l)	1
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	18 [µg/l] on the short term 10 [µg/l] on the long term

ETHYLCYCLOHEXANE

CAS Number: 1678-91-7

Also known as: CYCLOHEXYLETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	1678-91-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	788 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	112.22
Density of gas (kg/m3)	4.99
Boiling Point (°C)	132
Melting Point (°C)	-111.3
Vapour Pressure (Pa)	< 1427 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	238
Flash Point (°C)	18
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	6.6

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	FE/FED

Transportation data

Cargo group	31
State	liquide
Family name	paraffines

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ETHYLENE (gaz comprimé)

UN Number: 1962

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1962

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.125 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	28.05
Density of gas (kg/m3)	1.125
Boiling Point (°C)	-103.5
Melting Point (°C)	-169
Vapour Pressure (Pa)	415330041 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	425
Flash Point (°C)	-16
Lower explosivity limit (LEL) (volume %)	2.7
Upper explosivity limit (UEL) (volume %)	34

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Gaz,Colis
Cargo group	30
State	liq.compr.gas
Temperature (°C)	-104°
Pressure (Pa)	pressurisé
Family name	oléfines
IMO class	2(2.1)

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	600 ppm
TEEL-2 (mg/m3)	7500 ppm
TEEL-3 (mg/m3)	7500 ppm

Ecotoxicity

ETHYLENE (liquide réfrigéré)

UN Number: 1038

> **Also known as:** ETHENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1038

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.125 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	28.05
Density of gas (kg/m3)	1.125
Boiling Point (°C)	-103.5
Melting Point (°C)	-169
Vapour Pressure (Pa)	415330041 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	425
Flash Point (°C)	-16
Lower explosivity limit (LEL) (volume %)	2.7
Upper explosivity limit (UEL) (volume %)	34

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Gaz,Colis
Ship type	2G
Cargo group	30
State	gas liquéfié
Temperature (°C)	-104°

Pressure (Pa)	pressurisé
Family name	oléfines
IMO class	2(2.1)

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	600 ppm
TEEL-2 (mg/m3)	7500 ppm
TEEL-3 (mg/m3)	7500 ppm

Ecotoxicity

ETHYLENE GLYCOL

CAS Number: 107-21-1

> **Also known as:** 1,2-DIHYDROXY ETHANE, DIHYDROXYETHANE, DOWTHERM SRI (T), 1,2-ETHANEDIOL, ETHANE-1,2-DIOL, 1,2-Dihydroxyethane, Ethylene Alcohol, Ethylene Dihydrate, Glycol, Glycol Alcohol, Monoethylene Glycol, 2-Hydroxyethanol, Eg, Ethylene Glycol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	107-21-1
Formula	$C_2H_6O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1115 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	18.9 [cSt] at a temperature of 20°C 15.05 [cSt] at a temperature of 25°C
Molar mass (g/mol)	62.07
Density of gas (kg/m3)	2.761
Solubility (g/L)	1110000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	197.8
Melting Point (°C)	-16
Critical temperature (°C)	720
Critical pressure (Pa)	8000000
Surface tension (mN/m)	48.4 [mN/m] at a temperature of 20°C 47.99 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	2266 [Pa] at a temperature of 20°C 10 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	410
Flash Point (°C)	111
Flash Point (Pensky-Martens closed cup) (°C)	111
Flash Point (Cleveland open cup) (°C)	115
Lower explosivity limit (LEL) (volume %)	3.2
Upper explosivity limit (UEL) (volume %)	15.3

Vapor enthalpy (J/Kg)	813598 [J/Kg] at a temperature of 198°C 1029482 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	17000000
Specific heat capacity (J/(Kg·K))	2394.1
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.02
Rad fraction (%)	22
Henry's constant (mol/(m³·Pa))	0

Behaviour at sea

Log kow	-1.93
Log koc	0.6
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	10

Additional data

Colour	incolore	
Odour	inodore	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols

Reactivity data

Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

Notable risks	Reacts with oxidizers.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H373	May cause damage to organs through prolonged or repeated exposure, exposure cause the hazard:
TLV-TWA	100	
TEEL-1 (mg/m3)	10 ppm	
TEEL-2 (mg/m3)	40 ppm	
TEEL-3 (mg/m3)	60 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	10000
Lowest median lethal concentration (LC50) on crustacean (mg/l)	20000
Lowest median lethal concentration (LC50) on fishes (mg/l)	56484
Highest no observed effect concentration (NOEC) on algae (mg/l)	5740
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	3000
Assessment factor (AF)	1000 on the short term 1000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	10000 [µg/l] on the short term 3000 [µg/l] on the long term

ETHYLENEDIAMINE

UN Number: 1604 - CAS Number: 107-15-3

> **Also known as:** 1,2-DIAMINOETHANE, DIMETHYLENEDIAMINE, 1,2-ETHANEDIAMINE, Ethane-1,2-Diamine, Ethylenediamine

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1604
CAS number	107-15-3
Formula	$C_2H_8N_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	909 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.017151 [cSt] at a temperature of 25°C
Molar mass (g/mol)	60.1
Density of gas (kg/m3)	2.709
Solubility (g/L)	110000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	117
Melting Point (°C)	11.14
Critical temperature (°C)	613.1
Critical pressure (Pa)	6710000
Vapour Pressure (Pa)	1200 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	385
Flash Point (°C)	34
Flash Point (Pensky-Martens closed cup) (°C)	34
Lower explosivity limit (LEL) (volume %)	5.8
Upper explosivity limit (UEL) (volume %)	11.1
Vapor enthalpy (J/Kg)	631968 [J/Kg] at a temperature of 117°C 748444 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2872
Henry's constant (mol/(m³·Pa))	0.00018

Behaviour at sea

Log kow	-1.3
Log koc	1.17
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore
Odour	douce odeur d'ammoniaque

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	amines aliphatiques

Reactivity data

Water	Oui
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic

Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H311	Toxic in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H317	May cause an allergic skin reaction.
	H332	Harmful if inhaled.
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	**General**	
	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	Prevention	
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	Storage	
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	10				
	10 min	**30 min**	**60 min**	**4 hrs**	**8 hrs**
AEGL-2 (ppm)	12	12	9.7	6.1	4.8
AEGL-3 (ppm)	25	25	20	13	10

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	61
Lowest median lethal concentration (LC50) on crustacean (mg/l)	3
Lowest median lethal concentration (LC50) on fishes (mg/l)	115.7
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.16
Highest no observed effect concentration (NOEC) on fishes (mg/l)	> 10
Assessment factor (AF)	100 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	2 [µg/l] on the short term

ETHYLHEXALDEHYDES

UN Number: 1191

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1191

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	857 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	128.22
Boiling Point (°C)	164
Melting Point (°C)	< -76
Ignition Temperature (°C)	197
Flash Point (°C)	53

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	19
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	aldéhydes
IMO class	3.3

Reactivity data

Water	Non

Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

ETHYLIDENE NORBORNENE

CAS Number: 16219-75-3

Also known as: ENB

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	16219-75-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	896 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	120.2
Density of gas (kg/m3)	5.418
Boiling Point (°C)	147.8
Melting Point (°C)	-80
Vapour Pressure (Pa)	540 [Pa] at a temperature of 20°C
Flash Point (°C)	33
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	6.4

Behaviour at sea

Additional data

Colour	blanc
Odour	essence de térébenthine
Standard behavior classification	FE

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

ERPG-1 (ppm)	0.2
ERPG-2 (ppm)	100
ERPG-3 (ppm)	500

Ecotoxicity

ETHYLTOLUENE

CAS Number: 95-63-6

> **Also known as:** Pseudocumene, Trimethyl-1,2,4 Benzene, Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,2,4-Trimethyl Benzene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	95-63-6
Formula	C_9H_{12}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	881 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.843 [cSt] at a temperature of 20°C
Molar mass (g/mol)	120.19
Density of gas (kg/m3)	5.35
Solubility (g/L)	60 [g/L] at a temperature of 20°C and salinity of 0‰ 42 [g/L] at a temperature of 25°C and salinity of 0‰ 40 [g/L] at a temperature of 25°C and salinity of 34.5‰
Boiling Point (°C)	165.2
Melting Point (°C)	-80.8
Critical temperature (°C)	649.1
Critical pressure (Pa)	3232000
Surface tension (mN/m)	29.2 [mN/m] at a temperature of 25°C
Ignition Temperature (°C)	440
Flash Point (°C)	39
Flash Point (Pensky-Martens closed cup) (°C)	44
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	6.4
Vapor enthalpy (J/Kg)	398785 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	41000000
Specific heat capacity (J/(Kg·K))	1789
Combustion efficiency (%)	70

Mass flow rate of the combustion surface (Kg/(m²·s))	0.06
Rad fraction (%)	30
Henry's constant (mol/(m³·Pa))	624.162

Behaviour at sea

Log kow	3.78
Log koc	3.33
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	152

Additional data

Colour	incolore
Odour	agréable

MARPOL pollution category

Category	Description
X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Cargo group	32
State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures aromatiques

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating

Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
TEEL-1 (mg/m3)	500	
TEEL-2 (mg/m3)	500	
TEEL-3 (mg/m3)	500	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	4.35
Lowest median lethal concentration (LC50) on fishes (mg/l)	7.72
Assessment factor (AF)	1 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	120 [µg/l] on the short term

EXTINCTEURS (à gaz comprimé ou liquéfié)

UN Number: 1044

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1044

Physical chemical data

Physical State (20°C)	Gaz

Behaviour at sea

Additional data

Standard behavior classification	GD, G

Transportation data

State	liq.compr.gas
IMO class	2(2.2)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

FORMALDEHYDE en solution, inflammable

UN Number: 1198 - CAS Number: 50-00-0

Also known as: Formaldehyde Solutions (45% Or Less), Solutions De Formaldhyde (45% Ou Moins)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1198
CAS number	50-00-0
Formula	CH_2O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	18
Density of gas (kg/m3)	1.33
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	-20
Melting Point (°C)	-15
Vapour Pressure (Pa)	133 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	430
Flash Point (°C)	68
Upper explosivity limit (UEL) (volume %)	73

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur irritante

MARPOL pollution category	Category	Description
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	19
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	aldéhydes
IMO class	3.3

Reactivity data

Abilities	Solution.
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	30	
Hazard statements	**Health**	
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H317	May cause an allergic skin reaction.
	H331	Toxic if inhaled.
	H351	Suspected of causing cancer.
Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P361	Remove/Take off immediately all contaminated clothing.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
ERPG-2 (ppm)	10	
ERPG-3 (ppm)	25	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	14.7
Lowest median lethal concentration (LC50) on crustacean (mg/l)	14.7
Lowest median lethal concentration (LC50) on fishes (mg/l)	6.7
Predicted No Effect Concentration (PNEC) (µg/l)	5.8 [µg/l] on the short term

FORMAMIDE

CAS Number: 75-12-7

Also known as: CARBAMALDEHYDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	75-12-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	45.04
Density of gas (kg/m3)	2.06
Boiling Point (°C)	210.5
Melting Point (°C)	2.6
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	> 500
Flash Point (°C)	154

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	odeur ammoniacale

Transportation data

Cargo group	10
State	liquide
Temperature (°C)	ambiante
Family name	amides

Reactivity data

Water	Non

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	R - Reprotoxicity
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	20 ppm
TEEL-2 (mg/m3)	125 ppm
TEEL-3 (mg/m3)	1250 ppm

Ecotoxicity

FORMIATE DE METHYLE

UN Number: 1243 - CAS Number: 107-31-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1243
CAS number	107-31-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	977 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	60.1
Density of gas (kg/m3)	2.709
Boiling Point (°C)	32
Melting Point (°C)	-100
Vapour Pressure (Pa)	64000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	450
Flash Point (°C)	-20
Upper explosivity limit (UEL) (volume %)	22.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur agréable
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	< 29°
Pressure (Pa)	pressurisé
IMO class	3.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	5000
TLV-TWA	100
TEEL-1 (mg/m3)	150 ppm
TEEL-2 (mg/m3)	750 ppm
TEEL-3 (mg/m3)	4500 ppm

Ecotoxicity

FURALDEHYDES

UN Number: 1199 - CAS Number: 98-01-1

Also known as: ANT OIL (ARTIFICIAL), BRAN OIL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1199
CAS number	98-01-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1159 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	96.08
Density of gas (kg/m3)	4.269
Boiling Point (°C)	161.9
Melting Point (°C)	-34
Vapour Pressure (Pa)	140 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	315
Flash Point (°C)	56
Lower explosivity limit (LEL) (volume %)	2.1
Upper explosivity limit (UEL) (volume %)	19.3

Behaviour at sea

Additional data

Colour	incolore à brun rougeâtre
Odour	odeur d'amande

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	19
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	aldéhydes
IMO class	6.1

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	C - Carcinogenicity
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	250
ERPG-2 (ppm)	10
ERPG-3 (ppm)	100

Ecotoxicity

FURATHIOCARB

UN Number: 2982

Also known as: APRON

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2982

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1160 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	382.48
Boiling Point (°C)	160 (1.33 Pa)
Vapour Pressure (Pa)	8.4*10-5 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	jaune
Marine pollutant	P

Transportation data

Package group	I/II/III
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

FURYL-2 CARBINOL

UN Number: 2874 - CAS Number: 98-00-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2874
CAS number	98-00-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1130 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.1
Density of gas (kg/m3)	4.23
Boiling Point (°C)	170
Melting Point (°C)	-34
Vapour Pressure (Pa)	50 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	315
Flash Point (°C)	52
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	16.3

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	odeur assez irritante

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	alcools, glycols
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	250
TLV-TWA	10
TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	15 ppm
TEEL-3 (mg/m3)	75 ppm

Ecotoxicity

GASOIL

UN Number: 1202

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1202

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	848 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	190
Melting Point (°C)	-23
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	250
Flash Point (°C)	62
Upper explosivity limit (UEL) (volume %)	13.5

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence
Standard behavior classification	E, FE, F

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

GAZ MOUTARDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1274 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	216
Melting Point (°C)	13.5
Vapour Pressure (Pa)	9.33 [Pa] at a temperature of 20°C
Flash Point (°C)	105

Behaviour at sea

Additional data

Transportation data

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

	10 min	30 min	60 min	4 hrs	8 hrs
AEGL-1 (ppm)	0.06	0.02	0.01	0.003	0.001
AEGL-2 (ppm)	0.09	0.03	0.02	0.004	0.002
AEGL-3 (ppm)	0.59	0.41	0.32	0.08	0.04

Ecotoxicity

GLUCOSE

Also known as: DEXTROSE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	180.16
Melting Point (°C)	146

Behaviour at sea

Additional data

Colour	blanc

Transportation data

State	solide

Reactivity data

Reducing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

GLUTARATE DE DIMETHYLE

CAS Number: 26717-67-9

Also known as: DIMETHYL GLUTARATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	26717-67-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1087 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	160.17
Density of gas (kg/m3)	7.12
Boiling Point (°C)	93/95
Flash Point (°C)	103

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	34
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

GLYCERINE

CAS Number: 56-81-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	56-81-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1261 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	92.1
Density of gas (kg/m3)	4.089
Boiling Point (°C)	290
Melting Point (°C)	18
Vapour Pressure (Pa)	10100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	400
Flash Point (°C)	160

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	DE, D

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols

Reactivity data

Acid(s)	Oui

Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TLV-TWA	2.5
TEEL-1 (mg/m3)	125
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

GLYOXAL en solution (< 40%)

CAS Number: 107-22-2

Also known as: BIFORMYL, DIFORMYL, ETHANEDIOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	107-22-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1290 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	58
Boiling Point (°C)	104
Melting Point (°C)	-15
Vapour Pressure (Pa)	2400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	285
Flash Point (°C)	>100

Behaviour at sea

Additional data

Colour	jaune clair
Odour	légèrement aigre

Transportation data

Cargo group	19
State	liquide
Temperature (°C)	-0,244897959183673
Family name	aldéhydes

Reactivity data

Water	Non
Acid(s)	Oui

Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	35
TEEL-2 (mg/m3)	75
TEEL-3 (mg/m3)	75

Ecotoxicity

GOUDRON DE HOUILLE

UN Number: 3082 - CAS Number: 8007-45-2

Also known as: CARBO-CORT, COAL TAR, CRUDE COAL TAR

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	8007-45-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1160/1220 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	105/355
Flash Point (°C)	125

Behaviour at sea

Additional data

Colour	noir
Odour	inodore

Transportation data

Package group	III
State	liquide

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

HELIUM (gaz comprimé)

UN Number: 1046

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1046

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.25 [Kg/m³] at a temperature of 20°C
Density of gas (kg/m3)	1.25
Boiling Point (°C)	-268.75
Melting Point (°C)	-272.2
Vapour Pressure (Pa)	25000000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Transportation data

State	liq.compr.gas
IMO class	2(2.2)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	65000 ppm
TEEL-2 (mg/m3)	230000 ppm
TEEL-3 (mg/m3)	400000 ppm

Ecotoxicity

HELIUM (liquide réfrigéré)

UN Number: 1963

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1963

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.25 [Kg/m³] at a temperature of 20°C
Density of gas (kg/m3)	1.25
Boiling Point (°C)	-268.75
Melting Point (°C)	-272.2
Vapour Pressure (Pa)	25000000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Transportation data

State	gas liquéfié
IMO class	2(2.2)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	65000 ppm
TEEL-2 (mg/m3)	230000 ppm
TEEL-3 (mg/m3)	400000 ppm

Ecotoxicity

HEPTACHLORE solide

UN Number: 2761

> **Also known as:** AGROARES, 2-CHLOROCHLORIDENE, DRINOX, EPTACHLORO

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2761

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1660 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	373.5
Boiling Point (°C)	160
Melting Point (°C)	95

Behaviour at sea

Additional data

Colour	blanc à marron clair
Odour	odeur de camphre
Marine pollutant	P
Standard behavior classification	D, SD, S

Transportation data

Transport mode	Vrac,Colis
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	45
TLV-TWA	0.03
TEEL-1 (mg/m3)	0.5
TEEL-2 (mg/m3)	0.5
TEEL-3 (mg/m3)	35

Ecotoxicity

HEPTANES

UN Number: 1206 - CAS Number: 142-82-5

Also known as: DIPROPYLMETHANE, Heptane, Heptyl Hydride, N-Heptane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1206
CAS number	142-82-5
Formula	C_7H_{16}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	683.8 [Kg/m³] at a temperature of 20°C
	697.1 [Kg/m³] at a temperature of 5°C
	693.8 [Kg/m³] at a temperature of 10°C
	685.3 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.6 [cSt] at a temperature of 20°C
	0.57 [cSt] at a temperature of 25°C
	2.037 [cSt] at a temperature of 5°C
	1.989 [cSt] at a temperature of 10°C
	1.9408 [cSt] at a temperature of 20°C
Molar mass (g/mol)	100.21
Density of gas (kg/m3)	4.463
Solubility (g/L)	3 [g/L] at a temperature of 25°C and salinity of 0‰
	3.2 [g/L] at a temperature of 20°C and salinity of 0‰
	2.8 [g/L] at a temperature of 20°C and salinity of 5‰
	0.48 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	98
Melting Point (°C)	-91

Surface tension (mN/m)	19.3 [mN/m] at a temperature of 20°C 19.65 [mN/m] at a temperature of 25°C 21.6 [mN/m] at a temperature of 6°C 21.08 [mN/m] at a temperature of 10.1°C 20.32 [mN/m] at a temperature of 18.1°C
Interfacial tension (mN/m)	51 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	4799 [Pa] at a temperature of 20°C 6133 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	220
Flash Point (°C)	-4
Flash Point (Pensky-Martens closed cup) (°C)	-4
Lower explosivity limit (LEL) (volume %)	1.2
Upper explosivity limit (UEL) (volume %)	6.7
Vapor enthalpy (J/Kg)	317065 [J/Kg] at a temperature of 98°C 364960 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	44600000
Specific heat capacity (J/(Kg·K))	2242.4
Combustion efficiency (%)	97
Mass flow rate of the combustion surface (Kg/(m²·s))	0.11
Rad fraction (%)	33
Henry's constant (mol/(m³·Pa))	202650

Behaviour at sea

Log kow	4.66
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	1480

Additional data

Colour	incolore
Odour	odeur d'essence

MARPOL pollution category

Category	Description
X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Package group	II
Cargo group	31

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	paraffines
IMO class	3.2

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	5000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H336	May cause drowsiness or dizziness.
	Environmental	
	H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements	**General**	
	P102	Keep out of reach of children.
	Prevention	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P331	Do NOT induce vomiting.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	400	
TEEL-1 (mg/m3)	440 ppm	
TEEL-2 (mg/m3)	440 ppm	
TEEL-3 (mg/m3)	750 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.1
Lowest median lethal concentration (LC50) on fishes (mg/l)	4
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.17
Highest no observed effect concentration (NOEC) on fishes (mg/l)	1.284

HEPTANOL

Also known as: ALCOHOL C7, ENANTHYL ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	822 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.2
Density of gas (kg/m3)	5.16
Boiling Point (°C)	176
Melting Point (°C)	-30
Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C
Flash Point (°C)	65

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'alcool

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	10
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

HEXACHLOROCYCLOPENTADIENE

UN Number: 2646

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2646

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1720 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	272.7
Density of gas (kg/m3)	12.15
Boiling Point (°C)	239
Melting Point (°C)	10
Vapour Pressure (Pa)	1241 (104�C) [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	jaune verdâtre
Odour	aigre, désagréable

Transportation data

State	liquide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

Water	Oui
Metal(s) and alloys	Oui (Fe & others)

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.01
TEEL-1 (mg/m3)	0.0179 ppm
TEEL-2 (mg/m3)	0.0179 ppm
TEEL-3 (mg/m3)	0.0179 ppm

Ecotoxicity

HEXAFLUORURE D'URANIUM fissile

UN Number: 2977

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2977

Physical chemical data

Physical State (20°C)	Liquide
Molar mass (g/mol)	352
Boiling Point (°C)	56
Vapour Pressure (Pa)	14200 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Odour	oduer douce

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

ERPG-1 (ppm)	5 mg				
ERPG-2 (ppm)	15 mg				
ERPG-3 (ppm)	30 mg				
	10 min	**30 min**	**60 min**	**4 hrs**	**8 hrs**
AEGL-1 (ppm)	3.6	3.6	3.6		

AEGL-2 (ppm)	28	19	9.6	2.4	1.2
AEGL-3 (ppm)	216	72	36		4.5

Ecotoxicity

HEXAFLUORURE DE SOUFRE

UN Number: 1080

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1080

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	6.579 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	146.1
Density of gas (kg/m3)	6.579
Boiling Point (°C)	-64
Melting Point (°C)	-51
Vapour Pressure (Pa)	2100000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Odour	forte odeur irritante

Transportation data

State	liq.compr.gas
IMO class	2(2.2)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	1000
TEEL-1 (mg/m3)	3000 ppm
TEEL-2 (mg/m3)	5000 ppm
TEEL-3 (mg/m3)	5000 ppm

Ecotoxicity

Hexamethylenediamine

UN Number: 2280 - CAS Number: 124-09-4

> **Also known as:** 1,6-Hexanediamine, 1,6-Diaminohexane, Hexane-1,6-Diamine, Hmda, Hexamethylenediamine

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2280
CAS number	124-09-4
Formula	$C_6H_{16}N_2$

Physical chemical data

Physical State (25°C)	Solid
Molar mass (g/mol)	116.204
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	204.6
Melting Point (°C)	39.13
Flash Point (Cleveland open cup) (°C)	71
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	6.3
Combus enthalpy (J/Kg)	28400000
Henry's constant (mol/(m³·Pa))	7e-05

Behaviour at sea

Log kow	0.35
Log koc	2.21
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	1

Additional data

MARPOL pollution category	Category	Description
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

Abilities	Soluble in water.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	Health	
	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H335	May cause respiratory irritation.

Precautionary statements	**Prevention**	
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	14.8
Lowest median lethal concentration (LC50) on crustacean (mg/l)	23.4
Lowest median lethal concentration (LC50) on fishes (mg/l)	73.5
Highest no observed effect concentration (NOEC) on algae (mg/l)	3.2
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	4.16
Assessment factor (AF)	100 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	40 [µg/l] on the short term

HEXAMETHYLENEDIAMINE en solution

UN Number: 1783

Also known as: 1,6-DIAMINO HEXANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1783

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	933 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	116.21
Density of gas (kg/m3)	5.16
Boiling Point (°C)	205
Melting Point (°C)	41
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	305
Flash Point (°C)	80
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	6.3

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'ammoniaque

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide, solide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Family name	amines aliphatiques

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

HEXAMETHYLENEIMINE

UN Number: 2493 - CAS Number: 111-49-9

Also known as: AZACYCLOHEPTANE, CYCLO HEXAMETHYLENEAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2493
CAS number	111-49-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	880 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	99
Boiling Point (°C)	132
Vapour Pressure (Pa)	665 [Pa] at a temperature of 20°C
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	2.3

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	odeur d'ammoniac

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	amines aliphatiques
IMO class	3.2

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	40
TEEL-2 (mg/m3)	300
TEEL-3 (mg/m3)	500

Ecotoxicity

HEXENE-1

UN Number: 2370 - CAS Number: 592-41-6

Also known as: 1-Hexene, Butylethylene, Hex-1-Ene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2370
CAS number	592-41-6
Formula	C_6H_{12}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	673 [Kg/m³] at a temperature of 20°C 668.5 [Kg/m³] at a temperature of 25°C
Kinematic viscosity (cSt)	0.35 [cSt] at a temperature of 20°C 0.37696 [cSt] at a temperature of 25°C
Molar mass (g/mol)	84.16
Density of gas (kg/m3)	3.87
Solubility (g/L)	50 [g/L] at a temperature of 20°C and salinity of 0‰ 50 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	63.7
Melting Point (°C)	-140
Critical temperature (°C)	504
Surface tension (mN/m)	17.9 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	41320 [Pa] at a temperature of 20°C 24531 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	253
Flash Point (°C)	-18
Flash Point (Pensky-Martens closed cup) (°C)	-25
Lower explosivity limit (LEL) (volume %)	1.2
Upper explosivity limit (UEL) (volume %)	6.9
Vapor enthalpy (J/Kg)	363712 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2178

Henry's constant (mol/(m³·Pa))	41543

Behaviour at sea

Log kow	3.4
Log koc	2.17
Bioconcentration factor (BCF)	81

Additional data

Colour	incolore
Odour	odeur douce agréable

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines
IMO class	3.1

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating

Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P331	Do NOT induce vomiting.
TLV-TWA	500	
ERPG-2 (ppm)	500	
ERPG-3 (ppm)	5000	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	2.4
Lowest median lethal concentration (LC50) on crustacean (mg/l)	30
Lowest median lethal concentration (LC50) on fishes (mg/l)	1.3
Assessment factor (AF)	1 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	111 [µg/l] on the short term

HEXYLENEGLYCOL

CAS Number: 107-41-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	107-41-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	118.2
Density of gas (kg/m3)	5.16
Boiling Point (°C)	196
Melting Point (°C)	-100
Vapour Pressure (Pa)	6.5 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	306
Flash Point (°C)	96
Lower explosivity limit (LEL) (volume %)	1.2
Upper explosivity limit (UEL) (volume %)	8.1

Behaviour at sea

Additional data

Colour	incolore
Odour	légère et douce

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	25
TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	25 ppm
TEEL-3 (mg/m3)	350 ppm

Ecotoxicity

HUILE CARBOLIQUE (mélange)

UN Number: 2821

Also known as: CARBOLIC OIL (mixture), CARBOLIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2821

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1040 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	94.11
Boiling Point (°C)	181.8
Melting Point (°C)	41
Vapour Pressure (Pa)	82.7 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	715
Flash Point (°C)	79.4
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	8.6

Behaviour at sea

Additional data

Colour	fonci à la lumière
Odour	douce odeur de goudron

Transportation data

Transport mode	Vrac,Colis
Package group	II/III
Cargo group	21
State	liquide
Temperature (°C)	ambiante
Family name	phénols, crésols

IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	250
ERPG-1 (ppm)	10
ERPG-2 (ppm)	50
ERPG-3 (ppm)	200

Ecotoxicity

HUILE DE CAMPHRE

UN Number: 1130

Also known as: CAMPHOR LINIMENT (T), CAMPHOR OIL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1130

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	923 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	200

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore, brun ou bleu
Odour	odeur pénétrante de camphre
Standard behavior classification	D, FD, F

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	18
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	cétones
IMO class	7-Mar

Reactivity data

Acid(s)	Oui

Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	30
TLV-TWA	0.3

Ecotoxicity

HUILE DE FOIE DE MORUE

Also known as: COD LIVER OIL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide

Behaviour at sea

Additional data

Transportation data

Cargo group	34
State	liquide
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

Huile De Palme

CAS Number: 8002-75-3

Also known as: Palm Oil, Huile De Palme

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	8002-75-3

Physical chemical data

Physical State (25°C)	Solid
Mixed	Yes
Solubility (g/L)	0 [g/L] at a temperature of 20°C and salinity of 0‰ 0 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	338
Melting Point (°C)	27
Flash Point (Pensky-Martens closed cup) (°C)	162

Behaviour at sea

Log kow	22.52
Log koc	10
Biodegradation in estuary environment (Half-life) (days)	552

Additional data

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

Huile De Tall

CAS Number: 8002-26-4

Also known as: Tall Oil, Huile De Tall

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	8002-26-4

Physical chemical data

Physical State (25°C)	Liquid
Solubility (g/L)	0 [g/L] at a temperature of 20°C and salinity of 0‰ 0 [g/L] at a temperature of 25°C and salinity of 0‰
Flash Point (Pensky-Martens closed cup) (°C)	182.2

Behaviour at sea

Log kow	6.91
Log koc	5.429
Biodegradation in estuary environment (Half-life) (days)	1.844

Additional data

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

HUILES MINERALES

UN Number: 1270

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1270

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	841 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	288
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Flash Point (°C)	-18
Lower explosivity limit (LEL) (volume %)	1.3

Behaviour at sea

Additional data

Colour	jaune-brun
Odour	odeur d'essence
Standard behavior classification	E, FE, F

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.1/3.2/3.

Reactivity data

Acid(s)	Oui

Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

HYDRAZINE en solution (jusqu'à 64%mass. hydrazine)

UN Number: 2030

Also known as: DIAMIDE, DIAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2030

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1010 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	32.05
Density of gas (kg/m3)	1.35
Boiling Point (°C)	113.7
Vapour Pressure (Pa)	1386 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	270
Flash Point (°C)	5-38
Lower explosivity limit (LEL) (volume %)	4.7
Upper explosivity limit (UEL) (volume %)	100

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur assez douce

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	80
TLV-TWA	0.1
TEEL-1 (mg/m3)	0.0075
TEEL-2 (mg/m3)	0.0625
TEEL-3 (mg/m3)	50

Ecotoxicity

HYDROGENOPHOSPHITE DE DIMETHYLE

CAS Number: 868-89-9

> **Also known as:** DIMETHYL HYDROGEN PHOSPHITE, DIMETHYL PHOSPHITE, DIMETHYLPHOSPHONATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	868-89-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	110.05
Density of gas (kg/m3)	4.89
Boiling Point (°C)	170/171
Melting Point (°C)	<-60
Vapour Pressure (Pa)	135 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	237
Flash Point (°C)	70
Lower explosivity limit (LEL) (volume %)	5.8
Upper explosivity limit (UEL) (volume %)	38.1

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	34
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

HYDROGENOPHOSPHONATE DE DIBUTYLE

Also known as: DIBUTYL HYDROGENPHOSPHITE, DIBUTYL HYDROGEN PHOSPHONATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	980 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	194.21
Boiling Point (°C)	121
Melting Point (°C)	< 0
Vapour Pressure (Pa)	< 5000 [Pa] at a temperature of 20°C
Flash Point (°C)	120

Behaviour at sea

Additional data

Colour	incolore
Odour	légère

Transportation data

State	liquide

Reactivity data

Water	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

HYDROGENOSULFITE DE SODIUM en solution (< 45%)

UN Number: 2693 - CAS Number: 7631-90-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2693
CAS number	7631-90-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1360 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	104.06
Density of gas (kg/m3)	2.84
Boiling Point (°C)	> 100
Melting Point (°C)	< 0

Behaviour at sea

Additional data

Colour	jaune pâle
Odour	odeur irritante d'oxyde de soufre
Standard behavior classification	D/DE

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	43
State	liquide
Temperature (°C)	ambiante
Family name	sol. aqueuses diverses

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

TLV-TWA	1.08

Ecotoxicity

HYDROGENOSULFURE DE SODIUM en solution (< 45%)

UN Number: 2949 - CAS Number: 16721-80-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2949
CAS number	16721-80-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	< 1300 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	100
Melting Point (°C)	17

Behaviour at sea

Additional data

Colour	jaune clair à rouge
Odour	odeur d'oeufs pourris

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	> 17 °C
Family name	caustiques

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui

Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

HYDROGENOSULFURE DE SODIUM (<25% d'eau de cristallisation)

UN Number: 2318

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2318

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1300 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	64
Vapour Pressure (Pa)	2261 [Pa] at a temperature of 20°C
Lower explosivity limit (LEL) (volume %)	4.3
Upper explosivity limit (UEL) (volume %)	45.5

Behaviour at sea

Additional data

Colour	jaune clair à rouge
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	> 17°
Pressure (Pa)	pressurisé
Family name	caustiques
IMO class	4.2

Reactivity data

Water	Non

Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.15
TEEL-2 (mg/m3)	1.25

Ecotoxicity

HYDROSULPHITE DE ZINC

UN Number: 1931

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1931

Physical chemical data

Physical State (20°C)	Solide

Behaviour at sea

Additional data

Odour	inodore

Transportation data

Package group	III
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	4.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

HYDROXYDE DE CALCIUM

CAS Number: 1305-62-0

Also known as: CALCIUM HYDROXIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	1305-62-0

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2240 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	74.09

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	D, SD, S

Transportation data

State	solide, solut.

Reactivity data

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate

Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	1.5
TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

HYDROXYDE DE MAGNESIUM boue

CAS Number: 1309-42-8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	1309-42-8

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2400 [Kg/m^3] at a temperature of 20°C
Molar mass (g/mol)	58.3
Melting Point (°C)	350

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

Reactivity data

Water	Non
Acid(s)	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating

Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

Hydroxyde De Potassium (Solution)

UN Number: 1814 - CAS Number: 1310-58-3

> **Also known as:** Caustic Potash, Potassium Hydrate, Potash, Potassa, Potassium Hydroxide Solution, Potash Lye, Potassium Hydroxide (K(Oh)), Potassium Hydroxide Solid, Caustic Potash Solid, Caustic Potash Solution, Potassium Hydrate Solution, Potassium Hydrate Solid, Potassium Hydroxide, Potassium Hydroxide Solution (50%), Hydroxyde De Potassium (Solution)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1814
CAS number	1310-58-3
Formula	$KOH(H_2O)$

Physical chemical data

Physical State (25°C)	Liquid
Kinematic viscosity (cSt)	5.25 [cSt] at a temperature of 20°C
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	145
Melting Point (°C)	-43

Behaviour at sea

Additional data

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

Abilities	Solution.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Physical**	
	H290	May be corrosive to metals.
	Health	
	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
Precautionary statements	**Prevention**	
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.

Ecotoxicity

HYDROXYDE DE POTASSIUM en solution

UN Number: 1813

Also known as: CAUSTIC POTASH

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1813

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2040 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	56.11
Boiling Point (°C)	1320
Melting Point (°C)	410

Behaviour at sea

Additional data

Colour	incolore, blanc
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.8
TEEL-1 (mg/m3)	0.3
TEEL-3 (mg/m3)	125

Ecotoxicity

HYDROXYDE DE SODIUM en solution (< 33%)

UN Number: 1824 - CAS Number: 1310-73-2

Also known as: CAUSTIC SODA

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1824
CAS number	1310-73-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1480 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	40
Density of gas (kg/m3)	1.78
Boiling Point (°C)	140
Vapour Pressure (Pa)	900 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	II/III
State	liquide
Family name	caustiques

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Non

Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	250
ERPG-1 (ppm)	0.5
ERPG-3 (ppm)	50

Ecotoxicity

HYDROXYDE DE SODIUM solide

UN Number: 1823 - CAS Number: 1310-73-2

> **Also known as:** CAUSTIC SODA, Lye, Soda Lye, Sodium Hydrate, White Caustic, Sodium Hydroxide Solution, Caustic Soda Solution, Sodium Hydroxide (Na(Oh)), Sodium Hydrate Solution, Sodium Hydroxide Solid, Caustic Soda Solid, Sodium Hydrate Solid, Sodium Hydroxide, Sodium Hydroxide Solution (40%), Solution D'Hydroxyde De Sodium (40%)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1823
CAS number	1310-73-2
Formula	NaOH

Physical chemical data

Physical State (20°C)	Solide
Physical State (25°C)	Liquid
Density (kg/m3)	2100 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	25.35 [cSt] at a temperature of 20°C
Molar mass (g/mol)	40
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	1390
Melting Point (°C)	318

Behaviour at sea

Additional data

Colour	blanc
Odour	odeur d'oeufs pourris

MARPOL pollution category	Category	Description
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Abilities	Solution.
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non
Notable risks	Reacts with many compounds.

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	150	
Hazard statements	**Physical**	
	H290	May be corrosive to metals.
	Health	
	H314	Causes severe skin burns and eye damage.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
Precautionary statements	**Prevention**	
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.
TLV-TWA	1.2	
ERPG-1 (ppm)	0.5 mg	
ERPG-2 (ppm)	5 mg	
ERPG-3 (ppm)	50 mg	

Ecotoxicity

HYDRURE DE CALCIUM

UN Number: 1404

Also known as: CALCIUM HYDRIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1404

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	41.1
Density of gas (kg/m3)	1900
Melting Point (°C)	675

Behaviour at sea

Additional data

Standard behavior classification	D,SD

Transportation data

State	solide
IMO class	4.3

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-2 (mg/m3)	35
TEEL-3 (mg/m3)	150

Ecotoxicity

HYPOCHLORITE DE CALCIUM solide ou en mélange (>39% de chlore actif)

UN Number: 1748 - CAS Number: 8061-52-7

> **Also known as:** BLEACHING POWDER, CALCIUM HYPOCHLORITE dry or mixtures(>39% avail. chlorine), CAL HYPO, CHLORINATED LIME, CHLOROX (T), Lignosulfonic Acid, Calcium Salt, Calcium 3-(2-Hydroxy-3-Methoxyphenyl)-2-[2-Methoxy-4-(3-Sulfonatopropyl)Phenoxy]Propane-1-Sulfonate, Calcium Lignosulphonate Solutions, Solutions De Lignosulfonate De Calcium

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1748
CAS number	8061-52-7
Formula	$C_{20}H_{24}CaO_{10}S_2$

Physical chemical data

Physical State (20°C)	Solide
Physical State (25°C)	Liquid
Mixed	Yes
Density (kg/m3)	2300 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	174.98
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Melting Point (°C)	100

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	blanc
Odour	odeur d'eau de javel

MARPOL pollution category	Category	Description
	Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Standard behavior classification	D, SD

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	solide
IMO class	5.1

Reactivity data

Water	Non
Abilities	Solution.
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	5 - Very highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Environmental**	
	H413	May cause long lasting harmful effects to aquatic life.
TEEL-1 (mg/m3)	10	
TEEL-2 (mg/m3)	75	
TEEL-3 (mg/m3)	350	

Ecotoxicity

HYPOCHLORITE DE SODIUM en solution (>5% de chlore libre)

UN Number: 1791 - CAS Number: 7681-52-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1791
CAS number	7681-52-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1060 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	74.4
Melting Point (°C)	27

Behaviour at sea

Additional data

Colour	vert à jaune
Odour	inodore

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic

Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	500

Ecotoxicity

IODURE DE MERCURIE

UN Number: 1638

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1638

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	6300 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	454.9
Boiling Point (°C)	354
Vapour Pressure (Pa)	20881 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.9

Additional data

Colour	rouge
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.005 (Pb)

TEEL-1 (mg/m3)	0.17
TEEL-2 (mg/m3)	0.227
TEEL-3 (mg/m3)	22.7

Ecotoxicity

ISOBUTANE

UN Number: 1969

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1969

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.709 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	58.12
Density of gas (kg/m3)	2.709
Boiling Point (°C)	-11.6
Melting Point (°C)	-160
Vapour Pressure (Pa)	202600 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	460
Flash Point (°C)	-20
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	8.4

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	2(2.1)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	3000 ppm
TEEL-2 (mg/m3)	5000 ppm
TEEL-3 (mg/m3)	15000 ppm

Ecotoxicity

ISOBUTANOL

UN Number: 1212 - CAS Number: 78-83-1

> **Also known as:** Alcool Isobutylique, Isobutanol, Isopropyl Carbinol, 1-Hydroxymethylpropane, 2-Methyl-1-Propanol, Isobutyl Alcohol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1212
CAS number	78-83-1
Formula	$C_4H_{10}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	802 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	5 [cSt] at a temperature of 20°C 4.1532 [cSt] at a temperature of 25°C
Molar mass (g/mol)	74.12
Density of gas (kg/m3)	3.354
Solubility (g/L)	98000 [g/L] at a temperature of 20°C and salinity of 0‰ 85000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	108.1
Melting Point (°C)	-108
Critical molar volume (m³/mol)	0.000274
Critical temperature (°C)	547.8
Critical pressure (Pa)	4295000
Vapour Pressure (Pa)	1200 [Pa] at a temperature of 20°C 1330 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	430
Flash Point (°C)	27
Flash Point (Pensky-Martens closed cup) (°C)	28
Flash Point (Cleveland open cup) (°C)	32.2
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	10.9

Vapor enthalpy (J/Kg)	524220 [J/Kg] at a temperature of 108°C 685645 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	35900000
Specific heat capacity (J/(Kg·K))	226.88
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	22
Henry's constant (mol/(m³·Pa))	0.99

Behaviour at sea

Log kow	0.76
Log koc	1.75
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	1.97

Additional data

Colour	incolore
Odour	odeur d'alcool, choquante

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	3.3

Reactivity data

Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	8000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H315	Causes skin irritation.
	H318	Causes serious eye damage.
	H335	May cause respiratory irritation.
	H336	May cause drowsiness or dizziness.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P235	Store in a well-ventilated place. Keep cool.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	50
TEEL-1 (mg/m3)	1250 ppm
TEEL-2 (mg/m3)	1600 ppm
TEEL-3 (mg/m3)	1600 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	225
Lowest median lethal concentration (LC50) on crustacean (mg/l)	1100
Lowest median lethal concentration (LC50) on fishes (mg/l)	1430
Highest no observed effect concentration (NOEC) on algae (mg/l)	53
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	20
Assessment factor (AF)	1000 on the short term 10000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	225 [µg/l] on the short term 22.5 [µg/l] on the long term

ISOBUTYLENE

UN Number: 1055

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1055

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.451 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	56.1
Density of gas (kg/m3)	2.451
Boiling Point (°C)	-6.7
Melting Point (°C)	-140
Vapour Pressure (Pa)	19995 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	465
Flash Point (°C)	-76.1
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	9.6

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur d'essence

Transportation data

State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	2(2.1)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	750 ppm
TEEL-2 (mg/m3)	1250 ppm
TEEL-3 (mg/m3)	100000 ppm

Ecotoxicity

ISOCYANATES TOXIQUES

UN Number: 2206 - CAS Number: 9016-87-9

> **Also known as:** 4,4'-Mdi, 1,1'- Methylenebis(4-Isocyanatobenzene), Methylene Bis (4-Phenyl Isocyanate), Diphenylmethane Diisocyanate, 4,4'- Diisocyanate De Diphenylmethane, Polymethylene Polyphenyl Isocyanate, Polyphenyl Isocyanates De Polymethylene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2206
CAS number	9016-87-9
Formula	$[C_6H_3(NCO)CH_2]n$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	400
Boiling Point (°C)	200
Melting Point (°C)	41
Vapour Pressure (Pa)	10100 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	brun foncé
Odour	odeur légère

MARPOL pollution category	Category	Description
	Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Standard behavior classification	D, DE, SD

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	12
State	liquide
Temperature (°C)	2° - 52°
Pressure (Pa)	pressurisé
Family name	isocyanates
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Health**	
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335	May cause respiratory irritation.
	H351	Suspected of causing cancer.
	H373	May cause damage to organs through prolonged or repeated exposure, exposure cause the hazard:
Precautionary statements	**Prevention**	
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P285	In case of inadequate ventilation wear respiratory protection.
	Response	
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

TEEL-2 (mg/m3)	40

TEEL-3 (mg/m3)	200

Ecotoxicity

ISODECANOL

CAS Number: 25339-17-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	25339-17-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	841 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	158.29
Boiling Point (°C)	220
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	266
Flash Point (°C)	104
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	4.5

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore
Odour	odeur d'alcool
Standard behavior classification	E, FE, F

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

ISOPHORONE

CAS Number: 78-79-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	78-79-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	921 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	138.2
Density of gas (kg/m3)	6.153
Boiling Point (°C)	215
Melting Point (°C)	-8
Vapour Pressure (Pa)	40 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	460
Flash Point (°C)	96
Lower explosivity limit (LEL) (volume %)	0.84
Upper explosivity limit (UEL) (volume %)	3.8

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore
Odour	odeur de camphre
Standard behavior classification	FD

Transportation data

Cargo group	18
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	cétones

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	800
TEEL-1 (mg/m3)	0.71 ppm
TEEL-2 (mg/m3)	0.71 ppm
TEEL-3 (mg/m3)	200 ppm

Ecotoxicity

ISOPHORONEDIAMINE

UN Number: 2289 - CAS Number: 2855-13-2

Also known as: 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2289
CAS number	2855-13-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	924 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	170.3
Boiling Point (°C)	247
Melting Point (°C)	10
Vapour Pressure (Pa)	20.7 [Pa] at a temperature of 20°C
Flash Point (°C)	110
Lower explosivity limit (LEL) (volume %)	1.2

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur nauséabonde d'amine

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Specific Health Concern (D3)	Ss - Skin Sensitization
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ISOPRENE

UN Number: 1218

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1218

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	681 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	68.12
Density of gas (kg/m3)	3.032
Boiling Point (°C)	34.3
Melting Point (°C)	-146
Vapour Pressure (Pa)	53320 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	220
Flash Point (°C)	-20

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Vrac,Gaz,Colis
Ship type	2G,2PG
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	oléfines
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

ERPG-2 (ppm)	1000
ERPG-3 (ppm)	4000

Ecotoxicity

ISOPROPANOL

UN Number: 1219 - CAS Number: 67-63-0

> **Also known as:** DIMETHYL CARBINOL, Dimethylcarbinol, 2-Hydroxypropane, Ipa, Isopropanol, Isopropyl Alcohol, Propan-2-Ol, Sec-Propyl Alcohol, 2-Propyl Alcohol, Propanol, Propyl Alcohol, 2-Propanol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1219
CAS number	67-63-0
Formula	C_3H_8O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	785 [Kg/m³] at a temperature of 20°C
	787.5 [Kg/m³] at a temperature of 5°C
	794.6 [Kg/m³] at a temperature of 10°C
	794.6 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	3.05 [cSt] at a temperature of 20°C
	2.59 [cSt] at a temperature of 25°C
	5.6381 [cSt] at a temperature of 5°C
	4.5683 [cSt] at a temperature of 10°C
	4.4173 [cSt] at a temperature of 20°C
Molar mass (g/mol)	60.1
Density of gas (kg/m3)	2.67
Solubility (g/L)	790000 [g/L] at a temperature of 20°C and salinity of 0‰
	790000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	82.5
Melting Point (°C)	-88
Critical molar volume (m³/mol)	0.000222
Critical temperature (°C)	508.3
Critical pressure (Pa)	4764000

Surface tension (mN/m)	21.32 [mN/m] at a temperature of 20°C 20.93 [mN/m] at a temperature of 25°C 21.44 [mN/m] at a temperature of 6.9°C 21.0 [mN/m] at a temperature of 12.5°C 20.79 [mN/m] at a temperature of 20.2°C
Vapour Pressure (Pa)	27593 [Pa] at a temperature of 20°C 6060 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	395
Flash Point (°C)	12
Flash Point (Pensky-Martens closed cup) (°C)	12
Flash Point (Cleveland open cup) (°C)	14
Lower explosivity limit (LEL) (volume %)	2.3
Upper explosivity limit (UEL) (volume %)	12.7
Vapor enthalpy (J/Kg)	663172 [J/Kg] at a temperature of 82.3°C 755367 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	30500000
Specific heat capacity (J/(Kg·K))	2604.4
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	22
Henry's constant (mol/(m³·Pa))	1.06

Behaviour at sea

Log kow	0.05
Log koc	1.5
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore	
Odour	odeur désagréable d'alcool	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	DE	

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	3.2

Reactivity data

Abilities	Miscible in water.
Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	20000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash ... thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P403 + P235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	400
TEEL-1 (mg/m3)	400 ppm
TEEL-2 (mg/m3)	400 ppm
TEEL-3 (mg/m3)	2000 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	1800
Lowest median lethal concentration (LC50) on crustacean (mg/l)	1400
Lowest median lethal concentration (LC50) on fishes (mg/l)	9640
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	30
Assessment factor (AF)	1000 on the short term 1000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1400 [µg/l] on the short term 30 [µg/l] on the long term

ISOPROPANOLAMINE

CAS Number: 78-96-6

Also known as: 1-AMINOPROPANOL-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	78-96-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	970 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	75.1
Density of gas (kg/m3)	3.35
Boiling Point (°C)	159
Vapour Pressure (Pa)	190 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	335
Flash Point (°C)	71
Lower explosivity limit (LEL) (volume %)	2.2
Upper explosivity limit (UEL) (volume %)	12

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique

Transportation data

Family name	alkanolamines

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

ISOPROPYLAMINE

UN Number: 1221

Also known as: 2-AMINOPROPANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1221

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	691 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	59.11
Density of gas (kg/m3)	2.58
Boiling Point (°C)	32.6
Melting Point (°C)	-95
Vapour Pressure (Pa)	61300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	402
Flash Point (°C)	-37
Lower explosivity limit (LEL) (volume %)	2.3
Upper explosivity limit (UEL) (volume %)	12

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur d'ammoniac
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Gaz,Colis
Ship type	2G,2PG
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
IMO class	3.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	4000
TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	150 ppm
TEEL-3 (mg/m3)	750 ppm

Ecotoxicity

ISOPROPYLAMINE

UN Number: 1221 - CAS Number: 75-31-0

Also known as: 2-AMINOPROPANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1221
CAS number	75-31-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	691 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	59.11
Density of gas (kg/m3)	2.63
Boiling Point (°C)	32.4
Melting Point (°C)	-95
Vapour Pressure (Pa)	66580 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	402
Flash Point (°C)	-26
Lower explosivity limit (LEL) (volume %)	2.3
Upper explosivity limit (UEL) (volume %)	12

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur ammoniacale
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante

Family name	amines aliphatiques
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	750
TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	150 ppm
TEEL-3 (mg/m3)	750 ppm

Ecotoxicity

ISOPROPYLBENZENE

UN Number: 1918 - CAS Number: 98-82-8

Also known as: CUMENE, CUMOL, 2-Phenylpropane, Isopropylbenzene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1918
CAS number	98-82-8
Formula	C_9H_{12}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	866 [Kg/m³] at a temperature of 20°C 864 [Kg/m³] at a temperature of 25°C
Kinematic viscosity (cSt)	0.853 [cSt] at a temperature of 25°C
Molar mass (g/mol)	120.19
Density of gas (kg/m3)	5.354
Solubility (g/L)	50 [g/L] at a temperature of 20°C and salinity of 0‰ 61.3 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	152
Melting Point (°C)	-96
Critical temperature (°C)	631
Critical pressure (Pa)	3209000
Surface tension (mN/m)	27.69 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	5333 [Pa] at a temperature of 20°C 600 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	420
Flash Point (°C)	31
Flash Point (Pensky-Martens closed cup) (°C)	39
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	6.5
Vapor enthalpy (J/Kg)	375485 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	1753

Henry's constant (mol/(m³·Pa))	1165

Behaviour at sea

Log kow	3.66
Log koc	2.84
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	35.5

Additional data

Colour	incolore
Odour	odeur d'essence

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Package group	III
Cargo group	32
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	hydrocarbures aromatiques
IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	8000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H335	May cause respiratory irritation.
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P333	If skin irritation or rash occurs:
TLV-TWA	50	
TEEL-1 (mg/m3)	50 ppm	
TEEL-2 (mg/m3)	300 ppm	
TEEL-3 (mg/m3)	730 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	7.4
Lowest median lethal concentration (LC50) on fishes (mg/l)	2.7
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.73

Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.00068
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.0019
Predicted No Effect Concentration (PNEC) (µg/l)	22 [µg/l] on the long term

ISOPROPYLCYCLOHEXANE

CAS Number: 696-29-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	696-29-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	802 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	126.24
Density of gas (kg/m3)	5.61
Boiling Point (°C)	154.5
Melting Point (°C)	-89.4
Ignition Temperature (°C)	283
Flash Point (°C)	36

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	31
State	liquide
Temperature (°C)	ambiante
Family name	paraffines

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5

Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

KEROSENE

UN Number: 1223

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1223

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Density of gas (kg/m3)	5.81
Boiling Point (°C)	200
Melting Point (°C)	-20
Vapour Pressure (Pa)	271 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	220
Flash Point (°C)	30
Lower explosivity limit (LEL) (volume %)	0.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	200
TEEL-1 (mg/m3)	290
TEEL-2 (mg/m3)	1100
TEEL-3 (mg/m3)	1100

Ecotoxicity

LACTATE D'ETHYLE

UN Number: 1192

Also known as: ACTYOL (T), ACYTOL (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1192

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1030 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	118.1
Boiling Point (°C)	154
Flash Point (°C)	42
Lower explosivity limit (LEL) (volume %)	1.5
Upper explosivity limit (UEL) (volume %)	11.4

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	3.3

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

LATEX liquide synthétique

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1057 [Kg/m³] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.9

Additional data

Colour	blanc
Odour	odeur caractéristique

Transportation data

Cargo group	43
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	sol. aqueuses diverses

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

LIGNOSULFATE DE CALCIUM solutions

CAS Number: 8061-52-7

Also known as: CALCIUM LIGNOSULPHATE solutions

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	8061-52-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1260/1280 [Kg/m³] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	brun
Odour	légère
Standard behavior classification	D/DE

Transportation data

State	liquide

Reactivity data

Water	Non

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	5 - Very highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury

Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

LINDANE

UN Number: 2761

Also known as: AFICIDE, gamma-BENZENE HEXACHLORIDE, BENZENE HEXACHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2761

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	290.85
Boiling Point (°C)	323
Melting Point (°C)	112.5/113.5
Vapour Pressure (Pa)	1.2 [Pa] at a temperature of 20°C
Flash Point (°C)	999

Behaviour at sea

Additional data

Marine pollutant	P

Transportation data

Package group	I/II/III
State	solide
IMO class	6.1

Reactivity data

Base(s)	Oui
Metal(s) and alloys	Oui (Al)

GESAMP Hazard profile

Human toxicity threshold

IDHL	80
TEEL-1 (mg/m3)	1.5
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	50

Ecotoxicity

MALATHION

UN Number: 3082

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1234 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	330.36
Flash Point (°C)	163

Behaviour at sea

Additional data

Colour	jaune à brun foncé
Odour	odeur de putois

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	< 49°

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	350
TLV-TWA	0.7
TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	15

TEEL-3 (mg/m3)	250

Ecotoxicity

MELANGE ANTIDETONANT POUR CARBURANTS (contenant des alkyles de Pb)

UN Number: 1649

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1649

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1500/1700 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	90/120
Melting Point (°C)	6.111111111
Vapour Pressure (Pa)	6000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	> 140
Flash Point (°C)	38/100
Lower explosivity limit (LEL) (volume %)	1.8

Behaviour at sea

Additional data

Colour	rouge, orange ou bleu
Odour	odeur fruitée

Transportation data

Transport mode	Vrac,Colis
Cargo group	33
State	liquide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

Water	Non

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	40 mg/m3
TLV-TWA	0.15 mg/m3

Ecotoxicity

METALAXYL

Also known as: APRON

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1210 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	279.34
Melting Point (°C)	71.8/72.3
Vapour Pressure (Pa)	2.9*10-4 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Transportation data

State	solide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

METHACRYLATE D'ETHYLE

UN Number: 2277 - CAS Number: 97-63-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2277
CAS number	97-63-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	915 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	114
Density of gas (kg/m3)	5.083
Boiling Point (°C)	117
Melting Point (°C)	-75
Vapour Pressure (Pa)	1995 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	450
Flash Point (°C)	20
Lower explosivity limit (LEL) (volume %)	1.8

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore
Odour	odeur forte et désagréable
Standard behavior classification	FE

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	14
State	liquide
Temperature (°C)	< 38°

Pressure (Pa)	ambiante
Family name	acrylates
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	150 ppm
TEEL-2 (mg/m3)	750 ppm
TEEL-3 (mg/m3)	750 ppm

Ecotoxicity

METHACRYLATE DE BUTYLE, DECYLE, CETYLE-EICOSYLE

> **Also known as:** BUTYL, DECYL, CETYL, EICOSYL 2-METHYL-2-PROPENOATE, BUTYL, DECYL, CETYL-EICOSYL METHACRYLATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Molar mass (g/mol)	142.2
Boiling Point (°C)	163
Melting Point (°C)	-50
Vapour Pressure (Pa)	300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	290
Flash Point (°C)	50

Behaviour at sea

Additional data

Colour	incolore
Odour	légère

Transportation data

Cargo group	14
State	liquide
Temperature (°C)	ambiante
Family name	acrylates

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	7.5
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	500

Ecotoxicity

METHACRYLATE DE CETYLE-EICOSYLE

Also known as: CETYL EICOSYL METHACRYLATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	860 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	370
Melting Point (°C)	< 0/20
Vapour Pressure (Pa)	very low [Pa] at a temperature of 20°C
Flash Point (°C)	149

Behaviour at sea

Additional data

Colour	clair à brun
Odour	douce et légère

Transportation data

Cargo group	14
State	liquide

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

METHACRYLATE DE DODECYLE

Also known as: DODECYL METHACRYLATE, DODECYL-2-METHYL-2-PROPENOATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	868 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	254.42
Density of gas (kg/m3)	11.35
Melting Point (°C)	-22.2
Flash Point (°C)	> 110

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Cargo group	14
State	liquide
Temperature (°C)	ambiante
Family name	acrylates

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Reducing agents	Oui

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable

Human toxicity threshold

TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	100 ppm
TEEL-3 (mg/m3)	500 ppm

Ecotoxicity

METHACRYLATE DE METHYLE monomère

UN Number: 1247 - CAS Number: 80-62-6

> **Also known as:** DIAKON (T), Methyl Alpha-Methyl Acrylate, Methyl 2-Methyl-2-Propenoate, Methyl 2-Methyl Propenoate, 2-Methyl 2-Propenoic Acid, Methyl Ester, 2-Methyl Propenoic Acid, Methyl Ester, Methylpropylene-2-Carboxylate, Mma, Methyl Ester, Methyl Methacrylate, Methacrylate De Methyle, Methyl α-Methyl Acrylate

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1247
CAS number	80-62-6
Formula	$C_5H_8O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	945 [Kg/m³] at a temperature of 20°C
	957.4 [Kg/m³] at a temperature of 5°C
	953.4 [Kg/m³] at a temperature of 10°C
	943.8 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.65 [cSt] at a temperature of 20°C
	0.56 [cSt] at a temperature of 25°C
	2.1811 [cSt] at a temperature of 5°C
	2.1292 [cSt] at a temperature of 10°C
	1.9284 [cSt] at a temperature of 20°C
Molar mass (g/mol)	100.12
Density of gas (kg/m3)	4.451
Solubility (g/L)	16000 [g/L] at a temperature of 20°C and salinity of 0‰
	13640 [g/L] at a temperature of 20°C and salinity of 0‰
	13000 [g/L] at a temperature of 20°C and salinity of 5‰
	10370 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	101
Melting Point (°C)	-48

Surface tension (mN/m)	28 [mN/m] at a temperature of 20°C
	27.77 [mN/m] at a temperature of 5.1°C
	27.1 [mN/m] at a temperature of 10.9°C
	25.99 [mN/m] at a temperature of 19.8°C
Interfacial tension (mN/m)	14.3 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	5332 [Pa] at a temperature of 20°C
	5100 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	430
Flash Point (°C)	10
Flash Point (Pensky-Martens closed cup) (°C)	2
Flash Point (Cleveland open cup) (°C)	10
Lower explosivity limit (LEL) (volume %)	2.1
Upper explosivity limit (UEL) (volume %)	12.5
Vapor enthalpy (J/Kg)	359568 [J/Kg] at a temperature of 101°C
Combus enthalpy (J/Kg)	25400000
Specific heat capacity (J/(Kg·K))	1910
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.06
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	26.3

Behaviour at sea

Log kow	1.38
Log koc	2.11
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	6.2

Additional data

Colour	incolore	
Odour	odeur agréable	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	ED	

Transportation data

Transport mode	Vrac,Colis

Package group	II
Cargo group	14
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	acrylates
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	4000

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H335	May cause respiratory irritation.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	100	
TEEL-1 (mg/m3)	17 ppm	
TEEL-2 (mg/m3)	120 ppm	
TEEL-3 (mg/m3)	570 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	> 110
Lowest median lethal concentration (LC50) on crustacean (mg/l)	69
Lowest median lethal concentration (LC50) on fishes (mg/l)	> 79
Highest no observed effect concentration (NOEC) on algae (mg/l)	49
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	37
Highest no observed effect concentration (NOEC) on fishes (mg/l)	40
Assessment factor (AF)	1000 on the short term 500 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	69 [µg/l] on the short term 74 [µg/l] on the long term

METHACRYLATE DE n-BUTYLE

UN Number: 2227 - CAS Number: 97-88-1

Also known as: n-BUTYL METHACRYLATE inhibited

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2227
CAS number	97-88-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	897.5 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	142.2
Density of gas (kg/m3)	6.192
Boiling Point (°C)	163
Melting Point (°C)	-75
Vapour Pressure (Pa)	300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	294
Flash Point (°C)	46

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	14
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	acrylates
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	7.5
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	500

Ecotoxicity

METHACRYLONITRILE stabilisé

UN Number: 3079 - CAS Number: 126-98-7

Also known as: 2-CYANOPROPENE-1

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3079
CAS number	126-98-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	67.09
Density of gas (kg/m3)	2.98
Boiling Point (°C)	90/92
Melting Point (°C)	-35.8
Vapour Pressure (Pa)	8536 [Pa] at a temperature of 20°C
Flash Point (°C)	12
Upper explosivity limit (UEL) (volume %)	6.8

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	ED

Transportation data

Transport mode	Vrac,Colis
Cargo group	15
State	liquide
Temperature (°C)	ambiante
Family name	allyles substitués

IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	1 ppm
TEEL-2 (mg/m3)	13 ppm
TEEL-3 (mg/m3)	25 ppm

Ecotoxicity

METHAMIDOPHOS

UN Number: 2783

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2783

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1310 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	141.13
Melting Point (°C)	46.1
Vapour Pressure (Pa)	0.002 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore

Transportation data

Package group	I/II/III
State	solide
IMO class	6.1

Reactivity data

Water	Non
Base(s)	Oui
Metal(s) and alloys	Oui (mild steel and Cu)

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	10
TEEL-2 (mg/m3)	60

TEEL-3 (mg/m3)	60

Ecotoxicity

Methane

CAS Number: 72-82-8

> **Also known as:** Methyl Hydride, Marsh Gas, Methane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	72-82-8
Formula	CH_4

Physical chemical data

Physical State (25°C)	Gas
Molar mass (g/mol)	16.043
Solubility (g/L)	22 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	-161
Melting Point (°C)	-183
Critical temperature (°C)	190.56
Critical pressure (Pa)	4599000
Surface tension (mN/m)	14 [mN/m] at a temperature of -161°C
Interfacial tension (mN/m)	50 [mN/m] at a temperature of -161°C and salinity of 0‰
Vapour pressure at 70% of critical temperature (Pa)	447990
Flash Point (Pensky-Martens closed cup) (°C)	-188
Lower explosivity limit (LEL) (volume %)	5.3
Upper explosivity limit (UEL) (volume %)	14
Henry's constant (mol/(m³·Pa))	68901

Behaviour at sea

Log kow	1.09
Log koc	0.6
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	2

Additional data

MARPOL pollution category	Category	Description
	Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Reactivity data

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

Hazard statements	Physical	
	H220	Extremely flammable gas.

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	46.6
Lowest median lethal concentration (LC50) on fishes (mg/l)	24.11

METHANE (gaz comprimé)

UN Number: 1971

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1971

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	0.774 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	16.04
Density of gas (kg/m3)	0.774
Boiling Point (°C)	-261.3
Melting Point (°C)	-182
Vapour Pressure (Pa)	25000000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	595
Upper explosivity limit (UEL) (volume %)	15

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur légère

Transportation data

Transport mode	Gaz,Colis
Cargo group	31
State	liq.compr.gas
Temperature (°C)	< -162°
Pressure (Pa)	pressurisé
Family name	paraffines
IMO class	2(2.1)

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	3000 ppm
TEEL-2 (mg/m3)	5000 ppm
TEEL-3 (mg/m3)	200000 ppm

Ecotoxicity

METHANE (liquide réfrigéré)

UN Number: 1972

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1972

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	0.774 [Kg/m³] at a temperature of 20°C
Density of gas (kg/m3)	0.774
Boiling Point (°C)	-161
Melting Point (°C)	-183
Vapour Pressure (Pa)	25000000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	537
Upper explosivity limit (UEL) (volume %)	15

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur légère

Transportation data

Transport mode	Gaz,Colis
Ship type	2G
Cargo group	31
State	gas liquéfié
Temperature (°C)	< -162°
Pressure (Pa)	pressurisé
Family name	paraffines
IMO class	2(2.1)

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	3000 ppm
TEEL-2 (mg/m3)	5000 ppm
TEEL-3 (mg/m3)	200000 ppm

Ecotoxicity

METHANOL

UN Number: 1230 - CAS Number: 67-56-1

Also known as: COLONIAL SPIRIT, COLUMBIAN SPIRIT, Methylalcohol, Carbinol, Methanol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1230
CAS number	67-56-1
Formula	CH_4O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	792 [Kg/m³] at a temperature of 20°C
	805.5 [Kg/m³] at a temperature of 5°C
	801.3 [Kg/m³] at a temperature of 10°C
	793.2 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.776 [cSt] at a temperature of 20°C
	0.68739 [cSt] at a temperature of 25°C
	2.4209 [cSt] at a temperature of 5°C
	2.2339 [cSt] at a temperature of 10°C
	2.0171 [cSt] at a temperature of 20°C
Molar mass (g/mol)	32.04
Density of gas (kg/m3)	1.419
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	64.7
Melting Point (°C)	-98
Critical molar volume (m³/mol)	0.000117
Critical temperature (°C)	512.5
Critical pressure (Pa)	8084000

Surface tension (mN/m)	22.5 [mN/m] at a temperature of 20°C 20.14 [mN/m] at a temperature of 25°C 23.88 [mN/m] at a temperature of 4.1°C 23.06 [mN/m] at a temperature of 10.1°C 22.67 [mN/m] at a temperature of 18.1°C
Vapour Pressure (Pa)	12865 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	455
Flash Point (°C)	11
Flash Point (Pensky-Martens closed cup) (°C)	12
Flash Point (Cleveland open cup) (°C)	15.6
Lower explosivity limit (LEL) (volume %)	5.5
Upper explosivity limit (UEL) (volume %)	36.5
Vapor enthalpy (J/Kg)	1098870 [J/Kg] at a temperature of 64.6°C 1168154 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	22660882
Specific heat capacity (J/(Kg·K))	2531
Henry's constant (mol/(m³·Pa))	0.46

Behaviour at sea

Log kow	-0.77
Log koc	0
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	10

Additional data

Colour	incolore
Odour	odeur d'alcool

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	DE

Transportation data

Package group	II
Cargo group	20
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols
IMO class	3.2

Reactivity data

Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	T - Specific Target Organ Toxicity following single or repeated exposure
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	25000

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H331	Toxic if inhaled.
	H370	Causes damage to organs.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P270	Do no eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P361	Remove/Take off immediately all contaminated clothing.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P235	Store in a well-ventilated place. Keep cool.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	200	
ERPG-1 (ppm)	200	

ERPG-2 (ppm)	1000
ERPG-3 (ppm)	5000

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	1700
Lowest median lethal concentration (LC50) on fishes (mg/l)	11.5
Highest no observed effect concentration (NOEC) on algae (mg/l)	530
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	6.7
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.04
Assessment factor (AF)	100 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	2080 [µg/l] on the short term

METHYL-2 ETHYL-5 PYRIDINE

UN Number: 2300 - CAS Number: 104-90-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2300
CAS number	104-90-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	922 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	122.19
Vapour Pressure (Pa)	120 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.6

Additional data

Standard behavior classification	FD

Transportation data

Package group	III
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury

Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

METHYLACETYLENE et PROPADIENE (mélange) stabilisé

UN Number: 1060

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1060

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.94 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	40.1
Density of gas (kg/m3)	1.94
Boiling Point (°C)	-38
Vapour Pressure (Pa)	747460 [Pa] at a temperature of 20°C
Lower explosivity limit (LEL) (volume %)	3.4
Upper explosivity limit (UEL) (volume %)	10.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'aïl

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	30
State	liq.compr.gas
Temperature (°C)	< 52°
Pressure (Pa)	pressurisé
Family name	oléfines
IMO class	2(2.1)

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	15000
TLV-TWA	1000
TEEL-1 (mg/m3)	1250 ppm
TEEL-2 (mg/m3)	1250 ppm
TEEL-3 (mg/m3)	3400 ppm

Ecotoxicity

METHYLAMINE anhydre

UN Number: 1061

Also known as: AMINOMETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1061

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.393 [Kg/m³] at a temperature of 20°C
Vapour Pressure (Pa)	40000 [Pa] at a temperature of 20°C
Flash Point (°C)	-18

Behaviour at sea

Additional data

Standard behavior classification	GD

Transportation data

IMO class	2(2.1)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	100
TLV-TWA	10
ERPG-1 (ppm)	10
ERPG-2 (ppm)	100
ERPG-3 (ppm)	500

Ecotoxicity

METHYLAMINE solution aqueuse (< 42%)

UN Number: 1235 - CAS Number: 74-89-5

Also known as: AMINOMETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1235
CAS number	74-89-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	890 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	31.1 (pure)
Density of gas (kg/m3)	1.39
Boiling Point (°C)	48
Melting Point (°C)	-38
Vapour Pressure (Pa)	40000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	430
Flash Point (°C)	< 10
Lower explosivity limit (LEL) (volume %)	4.9
Upper explosivity limit (UEL) (volume %)	20.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur ammoniacale
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide

Temperature (°C)	ambiante
Family name	amines aliphatiques
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Al, Cu, Zn)
Oxidizing agents	Oui
Reducing agents	Oui (Hg)
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	100
ERPG-1 (ppm)	10
ERPG-2 (ppm)	100
ERPG-3 (ppm)	500

Ecotoxicity

METHYLAMYLCETONE

UN Number: 1110 - CAS Number: 110-43-0

Also known as: AMYLMETHYLCETONE, n-AMYLMETHYLCETONE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1110
CAS number	110-43-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	820 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	114.19
Density of gas (kg/m3)	> 1.29
Boiling Point (°C)	149
Melting Point (°C)	-35
Vapour Pressure (Pa)	345 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	393
Flash Point (°C)	39
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	7.9

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	FED

Transportation data

Package group	III
Cargo group	18
State	liquide

Temperature (°C)	ambiante
Family name	cétones
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	800
TLV-TWA	50
TEEL-1 (mg/m3)	100 ppm
TEEL-2 (mg/m3)	125 ppm
TEEL-3 (mg/m3)	800 ppm

Ecotoxicity

METHYLBUTENOL

CAS Number: 556-82-1

Also known as: 1-BUTEN-3-OL, 3-METHYL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	556-82-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	824 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	824
Density of gas (kg/m3)	3.83
Boiling Point (°C)	98/99
Vapour Pressure (Pa)	6800 (250°C) [Pa] at a temperature of 20°C
Flash Point (°C)	13

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	E/ED

Transportation data

Cargo group	20
Temperature (°C)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

METHYLBUTYNOL

CAS Number: 115-19-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	115-19-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	867 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	84.12
Boiling Point (°C)	104/105
Melting Point (°C)	2.6
Flash Point (°C)	25

Behaviour at sea

Additional data

Colour	incolore à jaune paille
Odour	inodore

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

METHYLCYCLOHEXANE

UN Number: 2296 - CAS Number: 108-87-2

Also known as: CYCLOHEXYLMETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2296
CAS number	108-87-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.2
Density of gas (kg/m3)	4.39
Boiling Point (°C)	100
Melting Point (°C)	-126
Vapour Pressure (Pa)	4800 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	258
Flash Point (°C)	-4
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	6.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur nauséabonde de benzène

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	31
State	liquide

Temperature (°C)	ambiante
Family name	paraffines
IMO class	3.2

Reactivity data

Water	Non
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	1200
TLV-TWA	400
TEEL-1 (mg/m3)	1200 ppm
TEEL-2 (mg/m3)	1200 ppm
TEEL-3 (mg/m3)	1200 ppm

Ecotoxicity

METHYLCYCLOPENTADIENE dimère

CAS Number: 26472-00-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	26472-00-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	941 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	160.26
Density of gas (kg/m3)	1.2
Boiling Point (°C)	200
Melting Point (°C)	-51
Flash Point (°C)	27
Upper explosivity limit (UEL) (volume %)	10

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Cargo group	30
State	liquide
Temperature (°C)	ambiante
Family name	oléfines

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	25
TEEL-2 (mg/m3)	200
TEEL-3 (mg/m3)	500

Ecotoxicity

METHYLDIETHANOLAMINE

CAS Number: 105-59-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	105-59-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1038 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	119.16
Boiling Point (°C)	247
Melting Point (°C)	-21
Vapour Pressure (Pa)	30 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	265
Flash Point (°C)	126
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	8.4

Behaviour at sea

Additional data

Colour	incolore

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	alkanolamines

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

METHYLETHYLCETONE

UN Number: 1193

Also known as: 2-BUTANONE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1193

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	810 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	72.11
Density of gas (kg/m3)	3.225
Boiling Point (°C)	80
Melting Point (°C)	-86
Vapour Pressure (Pa)	10500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	505
Flash Point (°C)	-1
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	11.5

Behaviour at sea

Additional data

Colour	incolore
Odour	douce
Standard behavior classification	DE

Transportation data

Package group	II
Cargo group	18
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	cétones
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	3000
TLV-TWA	200
TEEL-1 (mg/m3)	200 ppm
TEEL-2 (mg/m3)	2700 ppm
TEEL-3 (mg/m3)	4000 ppm

Ecotoxicity

METHYLHEPTYLCETONE

CAS Number: 821-55-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	821-55-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	832 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	142.24
Density of gas (kg/m3)	6.32
Boiling Point (°C)	192
Melting Point (°C)	-21
Vapour Pressure (Pa)	< 130 [Pa] at a temperature of 20°C
Flash Point (°C)	64

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	18
State	liquide
Temperature (°C)	ambiante
Family name	cétones

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver

Human toxicity threshold

TEEL-1 (mg/m3)	3 ppm
TEEL-2 (mg/m3)	20 ppm
TEEL-3 (mg/m3)	75 ppm

Ecotoxicity

METHYLISOBUTYLCETONE

UN Number: 1245 - CAS Number: 108-10-1

> **Also known as:** Hexanone, Hexone, Isobutyl Methyl Ketone, Isopropylacetone, 4-Methyl-2-Oxopentane, 2-Methyl-4-Pentanone, 4-Methyl-2-Pentanone, 2-Methylpropyl Methyl Ketone, Mibk, Methyl Isobutyl Cetone, Mic, Methyl Isobutyl Ketone

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1245
CAS number	108-10-1
Formula	$C_6H_{12}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	302 [Kg/m³] at a temperature of 20°C
	814.5 [Kg/m³] at a temperature of 5°C
	810.2 [Kg/m³] at a temperature of 10°C
	803.1 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.76 [cSt] at a temperature of 20°C
	0.68424 [cSt] at a temperature of 25°C
	2.3327 [cSt] at a temperature of 5°C
	2.8511 [cSt] at a temperature of 10°C
	2.2164 [cSt] at a temperature of 20°C
Molar mass (g/mol)	100.16
Density of gas (kg/m3)	4.463
Solubility (g/L)	18000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	116.4
Melting Point (°C)	-80
Critical temperature (°C)	574.6
Critical pressure (Pa)	3270000
Surface tension (mN/m)	23.6 [mN/m] at a temperature of 20°C
	24.47 [mN/m] at a temperature of 5.1°C
	23.73 [mN/m] at a temperature of 11.8°C
	23.61 [mN/m] at a temperature of 18.2°C

Vapour Pressure (Pa)	799 [Pa] at a temperature of 20°C 2640 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	460
Flash Point (°C)	14
Flash Point (Pensky-Martens closed cup) (°C)	13
Flash Point (Cleveland open cup) (°C)	23
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	7.5
Vapor enthalpy (J/Kg)	342299 [J/Kg] at a temperature of 116.2°C 403037 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	34700000
Specific heat capacity (J/(Kg·K))	2116.9
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.06
Rad fraction (%)	23
Henry's constant (mol/(m³·Pa))	14

Behaviour at sea

Persistence (days)	0.8
Log kow	1.38
Log koc	2.1
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	6

Additional data

Colour	incolore
Odour	odeur agréable

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	FED

Transportation data

Package group	II
Cargo group	18
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	cétones
IMO class	3.2

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Notable risks	Reacts with oxidizers.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	500	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

TLV-TWA	100

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	2000
Lowest median lethal concentration (LC50) on crustacean (mg/l)	1230
Lowest median lethal concentration (LC50) on fishes (mg/l)	505
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	7.8
Highest no observed effect concentration (NOEC) on fishes (mg/l)	57
Assessment factor (AF)	500 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	15.6 [µg/l] on the long term

METHYLPARATHION liquide

UN Number: 3018

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3018

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1360 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	263.2
Boiling Point (°C)	120
Melting Point (°C)	35
Vapour Pressure (Pa)	0.001 [Pa] at a temperature of 20°C
Flash Point (°C)	45

Behaviour at sea

Additional data

Colour	blanc brun
Odour	odeur d'aïl, d'oeufs pourris
Standard behavior classification	D, SD

Transportation data

State	liquide, solide
Temperature (°C)	< 10°
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.018
TEEL-1 (mg/m3)	0.34
TEEL-2 (mg/m3)	0.34
TEEL-3 (mg/m3)	15

Ecotoxicity

METHYLPROPYLCETONE

UN Number: 1249

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1249

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	810 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	86.1
Density of gas (kg/m3)	3.87
Boiling Point (°C)	102
Melting Point (°C)	-78
Vapour Pressure (Pa)	1600 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	452
Lower explosivity limit (LEL) (volume %)	1.6
Upper explosivity limit (UEL) (volume %)	8.2

Behaviour at sea

Additional data

Colour	incolore
Odour	agréable
Standard behavior classification	FED

Transportation data

Package group	II
Cargo group	18
State	liquide
Temperature (°C)	ambiante
Family name	cétones
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	1500
TEEL-1 (mg/m3)	150 ppm
TEEL-2 (mg/m3)	150 ppm
TEEL-3 (mg/m3)	1500 ppm

Ecotoxicity

METHYLSTYRENE

UN Number: 2303

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2303

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	910 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	118.18
Density of gas (kg/m3)	5.28
Boiling Point (°C)	163/165
Melting Point (°C)	-23
Vapour Pressure (Pa)	300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	420
Flash Point (°C)	40
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	6.6

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines

IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Oui
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	700
TLV-TWA	50
TEEL-1 (mg/m3)	100 ppm
TEEL-2 (mg/m3)	100 ppm
TEEL-3 (mg/m3)	700 ppm

Ecotoxicity

MONOOLEATE DE GLYCEROL

CAS Number: 25496-72-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	25496-72-4

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	950 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	356
Boiling Point (°C)	> 100
Melting Point (°C)	25/34
Flash Point (°C)	224

Behaviour at sea

Additional data

Colour	jaune
Odour	douce

Transportation data

State	solide
Temperature (°C)	< 34 °C
Family name	alcools, glycols

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

MORPHOLINE

UN Number: 2054 - CAS Number: 110-91-8

Also known as: DIETHYLENE OXIMIDE, DIETHYLENIMIDE OXIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2054
CAS number	110-91-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	87.12
Density of gas (kg/m3)	3.87
Boiling Point (°C)	128.2
Melting Point (°C)	-5
Vapour Pressure (Pa)	10666 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	255
Flash Point (°C)	31
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	10.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de poisson, d'ammoniaque
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide

Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	amines aliphatiques
IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	8000
TLV-TWA	20
TEEL-1 (mg/m3)	30 ppm
TEEL-2 (mg/m3)	30 ppm
TEEL-3 (mg/m3)	1400 ppm

Ecotoxicity

MYRCENE

CAS Number: 123-35-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	123-35-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	801 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	136.24
Density of gas (kg/m3)	6.03
Boiling Point (°C)	167
Vapour Pressure (Pa)	930 [Pa] at a temperature of 20°C
Flash Point (°C)	39

Behaviour at sea

Additional data

Colour	teinté en jaune
Odour	agréable
Standard behavior classification	FE

Transportation data

Cargo group	30
Family name	oléfines

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5

Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

N,N-DIMETHYLFORMAMIDE

UN Number: 2265 - CAS Number: 68-12-2

> **Also known as:** N,N'-DIMETHYLFORMAMIDE, DIMETHYL FORMAMIDE, DMF, DMFA, N,N-Dimethylformamide, Dimethylformamide

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2265
CAS number	68-12-2
Formula	C_3H_7NO

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	950 [Kg/m³] at a temperature of 20°C 944.5 [Kg/m³] at a temperature of 25°C
Kinematic viscosity (cSt)	0.85 [cSt] at a temperature of 25°C
Molar mass (g/mol)	73.09
Density of gas (kg/m3)	3.225
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	153
Melting Point (°C)	-61
Critical molar volume (m³/mol)	0.000262
Critical temperature (°C)	649.6
Critical pressure (Pa)	4480000
Surface tension (mN/m)	36.42 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	500 [Pa] at a temperature of 20°C 516 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	440
Flash Point (°C)	58
Flash Point (Pensky-Martens closed cup) (°C)	58
Flash Point (Cleveland open cup) (°C)	67
Lower explosivity limit (LEL) (volume %)	2.2
Upper explosivity limit (UEL) (volume %)	15.2

Vapor enthalpy (J/Kg)	641503 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2060
Henry's constant (mol/(m³·Pa))	0.00747

Behaviour at sea

Log kow	-0.87
Log koc	0
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	0.3

Additional data

Colour	incolore
Odour	légère odeur d'ammoniaque

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	III
Cargo group	10
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	amides
IMO class	3.3

Reactivity data

Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate

Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	3500	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H312	Harmful in contact with skin.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H360	May damage fertility or the unborn child.
Precautionary statements	**Prevention**	
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
TLV-TWA	10	
ERPG-2 (ppm)	100	
ERPG-3 (ppm)	200	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	> 1000

Lowest median lethal concentration (LC50) on crustacean (mg/l)	> 100
Lowest median lethal concentration (LC50) on fishes (mg/l)	1430
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1140
Assessment factor (AF)	50 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	22800 [µg/l] on the short term

N-AMINOETHYLPIPERAZINE

UN Number: 2815 - CAS Number: 140-31-8

Also known as: 1-(-2-AMINOETHYL)PIPERAZINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2815
CAS number	140-31-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	985 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	129.24
Density of gas (kg/m3)	5.68
Boiling Point (°C)	222
Melting Point (°C)	-19
Vapour Pressure (Pa)	150 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	360
Flash Point (°C)	93.3

Behaviour at sea

Additional data

Colour	jaune pâle
Odour	odeur ammoniacale

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Specific Health Concern (D3)	Ss - Skin Sensitization
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	7.5
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	500

Ecotoxicity

n-AMYLENE

UN Number: 1108

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1108

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	641 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	70.13
Density of gas (kg/m3)	2.71
Boiling Point (°C)	30.1
Vapour Pressure (Pa)	66000 [Pa] at a temperature of 20°C
Flash Point (°C)	-18
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	8.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence
Standard behavior classification	DE, ED, E

Transportation data

Transport mode	Vrac,Colis
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines
IMO class	3.1

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	750 ppm
TEEL-2 (mg/m3)	6000 ppm
TEEL-3 (mg/m3)	75000 ppm

Ecotoxicity

n-BUTANOL

UN Number: 1120 - CAS Number: 71-36-3

> **Also known as:** BUTANOL, 1-BUTANOL, BUTAN-1-OL, n-BUTANOL, 2-BUTYL ALCOHOL, BUTYL ALCOHOL, n-BUTYL ALCOHOL, Normal Primary BUTYL ALCOHOL, BUTYL HYDROXIDE, CC SS 203, N-Butanol, Butyric Alcohol, 1-Hydroxybutane, Propylcarbinol, N-Butyl Alcohol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1120
CAS number	71-36-3
Formula	$C_4H_{10}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	810 [Kg/m³] at a temperature of 20°C
	821.3 [Kg/m³] at a temperature of 5°C
	817.9 [Kg/m³] at a temperature of 10°C
	811.6 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	3.7 [cSt] at a temperature of 20°C
	3.1377 [cSt] at a temperature of 25°C
	5.82 [cSt] at a temperature of 5°C
	11.97 [cSt] at a temperature of 10°C
	4.7807 [cSt] at a temperature of 20°C
Molar mass (g/mol)	74.12
Density of gas (kg/m3)	3.29
Solubility (g/L)	77000 [g/L] at a temperature of 20°C and salinity of 0‰
	68600 [g/L] at a temperature of 25°C and salinity of 0‰
	72670 [g/L] at a temperature of 20°C and salinity of 0‰
	66730 [g/L] at a temperature of 20°C and salinity of 5‰
	54260 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	117.7
Melting Point (°C)	-89
Critical molar volume (m³/mol)	0.000274
Critical temperature (°C)	563

Critical pressure (Pa)	4414000
Surface tension (mN/m)	24.6 [mN/m] at a temperature of 20°C 24.93 [mN/m] at a temperature of 25°C 25.71 [mN/m] at a temperature of 3.8°C 24.9 [mN/m] at a temperature of 11.1°C 24.25 [mN/m] at a temperature of 18.4°C
Interfacial tension (mN/m)	50 [mN/m] at a temperature of 25°C and salinity of 0‰
Vapour Pressure (Pa)	626 [Pa] at a temperature of 20°C 893 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	340
Flash Point (°C)	35
Flash Point (Pensky-Martens closed cup) (°C)	28.9
Flash Point (Cleveland open cup) (°C)	36.1
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	11.2
Vapor enthalpy (J/Kg)	584045 [J/Kg] at a temperature of 117.6°C 706277 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	35900000
Specific heat capacity (J/(Kg·K))	2390.7
Combustion efficiency (%)	98
Mass flow rate of the combustion surface (Kg/(m²·s))	0.05
Rad fraction (%)	22
Henry's constant (mol/(m³·Pa))	0.89

Behaviour at sea

Log kow	0.88
Log koc	1.85
Aqueous photolysis (Half-life)	4.09
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	2.72

Additional data

Colour	incolore
Odour	odeur d'alcool

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	III
Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	8000

Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H318	Causes serious eye damage.
	H335	May cause respiratory irritation.
	H336	May cause drowsiness or dizziness.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P235	Store in a well-ventilated place. Keep cool.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	50	
TEEL-1 (mg/m3)	50 ppm	
TEEL-2 (mg/m3)	50 ppm	
TEEL-3 (mg/m3)	1400 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	225
Lowest median lethal concentration (LC50) on crustacean (mg/l)	1328
Lowest median lethal concentration (LC50) on fishes (mg/l)	1376
Highest no observed effect concentration (NOEC) on algae (mg/l)	129
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	20
Assessment factor (AF)	1000 on the short term
	1000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	225 [µg/l] on the short term
	20 [µg/l] on the long term

N-ETHYLBUTYLAMINE

CAS Number: 13360-63-9

Also known as: BUTYLETHYLAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	13360-63-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	740 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	101.2
Density of gas (kg/m3)	4.515
Boiling Point (°C)	108.5
Vapour Pressure (Pa)	2710 [Pa] at a temperature of 20°C
Flash Point (°C)	13

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'amine

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

N-ETHYLCYCLOHEXYLAMINE

CAS Number: 5459-93-8

Also known as: CYCLOHEXYLAMINE, N-ETHYL, N-CYCLOHEXYLETHYLAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	5459-93-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	853 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	127.23
Density of gas (kg/m3)	5.68
Boiling Point (°C)	165
Melting Point (°C)	-45
Ignition Temperature (°C)	545
Flash Point (°C)	30

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de musc et d'ammoniaque
Standard behavior classification	FD/FED/ED

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui

Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FED - Floater/Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

n-HEPTENE

UN Number: 2278

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2278

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	697 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.18
Density of gas (kg/m3)	5.173
Boiling Point (°C)	93
Melting Point (°C)	119
Vapour Pressure (Pa)	15960 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	260

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines
IMO class	3.2

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

n-HEXANE

UN Number: 1208 - CAS Number: 100-54-3

Also known as: DIPROPYL, Hexane, Hexyl Hydride, Normal Hexane, N-Hexane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1208
CAS number	100-54-3
Formula	C_6H_{14}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	659 [Kg/m³] at a temperature of 20°C
	675.3 [Kg/m³] at a temperature of 5°C
	669.6 [Kg/m³] at a temperature of 10°C
	661.3 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.47 [cSt] at a temperature of 20°C
	0.45 [cSt] at a temperature of 25°C
	1.7918 [cSt] at a temperature of 5°C
	1.5532 [cSt] at a temperature of 10°C
	1.6936 [cSt] at a temperature of 20°C
Molar mass (g/mol)	86.17
Density of gas (kg/m3)	3.87
Solubility (g/L)	10 [g/L] at a temperature of 20°C and salinity of 0‰
	8 [g/L] at a temperature of 25°C and salinity of 35.3‰
	8.8 [g/L] at a temperature of 20°C and salinity of 0‰
	7.1 [g/L] at a temperature of 20°C and salinity of 5‰
	6.6 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	68.9
Melting Point (°C)	-95

Surface tension (mN/m)	18.43 [mN/m] at a temperature of 20°C 17.89 [mN/m] at a temperature of 25°C 19.92 [mN/m] at a temperature of 5°C 19.09 [mN/m] at a temperature of 10°C 18.6 [mN/m] at a temperature of 17.7°C
Interfacial tension (mN/m)	51.1 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	15996 [Pa] at a temperature of 20°C 19998 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	260
Flash Point (°C)	-22
Flash Point (Pensky-Martens closed cup) (°C)	-22
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	7.7
Vapor enthalpy (J/Kg)	334494 [J/Kg] at a temperature of 69°C 366295 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	44700000
Specific heat capacity (J/(Kg·K))	2270.2
Combustion efficiency (%)	96
Mass flow rate of the combustion surface (Kg/(m²·s))	0.08
Rad fraction (%)	33
Henry's constant (mol/(m³·Pa))	171239

Behaviour at sea

Log kow	3.29
Log koc	2.9
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	585

Additional data

Colour	incolore
Odour	odeur d'essence

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Package group	II

Cargo group	31
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	paraffines
IMO class	3.1

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	5000

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H336	May cause drowsiness or dizziness.
	H361	Suspected of damaging fertility or the unborn child.
	H373	May cause damage to organs through prolonged or repeated exposure, exposure cause the hazard:
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	**General**	
	P102	Keep out of reach of children.
	P103	Read label before use.
	Prevention	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P331	Do NOT induce vomiting.
TLV-TWA	50	
TEEL-1 (mg/m3)	400 ppm	
TEEL-2 (mg/m3)	3300 ppm	
TEEL-3 (mg/m3)	8600 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	50
Lowest median lethal concentration (LC50) on fishes (mg/l)	2.5

n-HEXANOL

UN Number: 2282 - CAS Number: 111-27-3

Also known as: AMYL CARBINOL, CAPROYL ALCOHOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2282
CAS number	111-27-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	850 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.18
Density of gas (kg/m3)	4.515
Boiling Point (°C)	157.3
Melting Point (°C)	-45
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	290
Flash Point (°C)	63
Lower explosivity limit (LEL) (volume %)	1.2
Upper explosivity limit (UEL) (volume %)	7.7

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Package group	III
Cargo group	20
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	alcools, glycols
IMO class	3.3

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	2 ppm
TEEL-2 (mg/m3)	15 ppm
TEEL-3 (mg/m3)	75 ppm

Ecotoxicity

N-METHYLPYRROLIDONE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1030 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	99
Density of gas (kg/m3)	1030
Boiling Point (°C)	202
Melting Point (°C)	-24
Ignition Temperature (°C)	270
Flash Point (°C)	96
Lower explosivity limit (LEL) (volume %)	0.99
Upper explosivity limit (UEL) (volume %)	3.9

Behaviour at sea

Additional data

Colour	blanc
Odour	douce odeur de poisson

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	R - Reprotoxicity
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	10
TEEL-2 (mg/m3)	25
TEEL-3 (mg/m3)	25

Ecotoxicity

n-OCTANE

UN Number: 1262 - CAS Number: 111-65-9

Also known as: N-Octane, Octane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1262
CAS number	111-65-9
Formula	C_8H_{18}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	703 [Kg/m³] at a temperature of 20°C 698.6 [Kg/m³] at a temperature of 25°C
Molar mass (g/mol)	114.2
Density of gas (kg/m3)	5.792
Solubility (g/L)	0.66 [g/L] at a temperature of 20°C and salinity of 0‰ 0.66 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	125.9
Melting Point (°C)	-16
Critical molar volume (m³/mol)	0.000492
Critical temperature (°C)	568.7
Critical pressure (Pa)	2490000
Surface tension (mN/m)	21.62 [mN/m] at a temperature of 20°C 21.14 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	1306 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	210
Flash Point (°C)	81
Flash Point (Pensky-Martens closed cup) (°C)	13
Flash Point (Cleveland open cup) (°C)	22
Lower explosivity limit (LEL) (volume %)	1
Upper explosivity limit (UEL) (volume %)	6.5

Vapor enthalpy (J/Kg)	301237 [J/Kg] at a temperature of 126°C 363310 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	47715549
Specific heat capacity (J/(Kg·K))	2229
Henry's constant (mol/(m³·Pa))	324240

Behaviour at sea

Log kow	5.18
Log koc	2.64
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	1200

Additional data

Colour	incolore	
Odour	odeur d'essence	
MARPOL pollution category	**Category**	**Description**
	X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.
Standard behavior classification	FE	

Transportation data

Package group	II
Cargo group	31
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	paraffines
IMO class	3.2

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	5000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H336	May cause drowsiness or dizziness.
	Environmental	
	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	Storage	
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	300	
TEEL-1 (mg/m3)	300 ppm	
TEEL-2 (mg/m3)	385 ppm	
TEEL-3 (mg/m3)	1000 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.38
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.17
Assessment factor (AF)	1 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	10 [µg/l] on the short term

n-PENTANE

UN Number: 1265 - CAS Number: 109-66-0

Also known as: N-Pentane, Pentane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1265
CAS number	109-66-0
Formula	C_5H_{12}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	626 [Kg/m³] at a temperature of 20°C
	642.9 [Kg/m³] at a temperature of 5°C
	638.4 [Kg/m³] at a temperature of 10°C
	627.8 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.35771 [cSt] at a temperature of 25°C
	13377 [cSt] at a temperature of 5°C
	1.3315 [cSt] at a temperature of 10°C
	0.98758 [cSt] at a temperature of 20°C
Molar mass (g/mol)	72.15
Density of gas (kg/m3)	3.211
Solubility (g/L)	38 [g/L] at a temperature of 25°C and salinity of 0‰
	28 [g/L] at a temperature of 25°C and salinity of 35‰
	37 [g/L] at a temperature of 20°C and salinity of 0‰
	38 [g/L] at a temperature of 20°C and salinity of 5‰
	27 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	36.3
Melting Point (°C)	-130
Critical molar volume (m³/mol)	0.000311
Critical temperature (°C)	469.7
Critical pressure (Pa)	3370000

Surface tension (mN/m)	16 [mN/m] at a temperature of 20°C 15.49 [mN/m] at a temperature of 25°C 17.55 [mN/m] at a temperature of 5.1°C 16.77 [mN/m] at a temperature of 10.2°C 16.43 [mN/m] at a temperature of 16.43°C
Vapour Pressure (Pa)	533320 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	285
Flash Point (°C)	-20
Flash Point (Pensky-Martens closed cup) (°C)	-49
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	8.5
Vapor enthalpy (J/Kg)	357455 [J/Kg] at a temperature of 30.06°C 366190 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	48635463
Specific heat capacity (J/(Kg·K))	2317
Henry's constant (mol/(m³·Pa))	12800

Behaviour at sea

Log kow	3.64
Log koc	1.86
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	80

Additional data

Colour	incolore	
Odour	odeur d'essence	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	31
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	paraffines
IMO class	3.1

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	15000	
Hazard statements	**Physical**	
	H224	Extremely flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H336	May cause drowsiness or dizziness.
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P331	Do NOT induce vomiting.
	P370 + P378	In case of fire: Use ... for extinction.
	P391	Collect spillage.
	Storage	
	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P403 + P235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	600
TEEL-1 (mg/m3)	610 ppm
TEEL-2 (mg/m3)	610 ppm
TEEL-3 (mg/m3)	1500 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	1.19
Highest no observed effect concentration (NOEC) on algae (mg/l)	4.549

Assessment factor (AF)	100 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	27 [µg/l] on the short term

n-PROPANOLAMINE

CAS Number: 156-87-6

Also known as: 3-AMINO, 1-PROPANOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	156-87-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	982 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	75.11
Density of gas (kg/m3)	3.35
Boiling Point (°C)	188
Melting Point (°C)	11
Flash Point (°C)	79

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	odeur de poisson

Transportation data

Family name	alkanolamines

Reactivity data

Water	Non
Acid(s)	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000

Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	0.04
TEEL-2 (mg/m3)	0.3
TEEL-3 (mg/m3)	500

Ecotoxicity

n-PROPYLAMINE

UN Number: 1277 - CAS Number: 107-10-8

Also known as: 1-AMINOPROPANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1277
CAS number	107-10-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	720 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	59.11
Density of gas (kg/m3)	2.64
Boiling Point (°C)	49
Melting Point (°C)	-83
Vapour Pressure (Pa)	33000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	260
Flash Point (°C)	-37
Upper explosivity limit (UEL) (volume %)	10.4

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur ammoniacale
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	froide

Family name	amines aliphatiques
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	50 ppm
TEEL-2 (mg/m3)	250 ppm
TEEL-3 (mg/m3)	250 ppm

Ecotoxicity

n-PROPYLBENZENE

UN Number: 2364 - CAS Number: 103-65-1

Also known as: BENZENE, PROPYL, Isocumene, Propylbenzene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2364
CAS number	103-65-1
Formula	C_9H_{12}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	862 [Kg/m³] at a temperature of 20°C 859.3 [Kg/m³] at a temperature of 25°C
Molar mass (g/mol)	120.19
Density of gas (kg/m3)	5.34
Solubility (g/L)	60 [g/L] at a temperature of 15°C and salinity of 0‰ 55 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	160
Melting Point (°C)	-100
Critical molar volume (m³/mol)	0.00044
Critical temperature (°C)	638.35
Critical pressure (Pa)	3200000
Vapour Pressure (Pa)	332 [Pa] at a temperature of 20°C 455 [Pa] at a temperature of 25°C
Flash Point (°C)	30
Flash Point (Pensky-Martens closed cup) (°C)	30
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	6
Vapor enthalpy (J/Kg)	384554 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	1786
Henry's constant (mol/(m³·Pa))	1064

Behaviour at sea

Log kow	3.6
Log koc	2.91
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	138

Additional data

Colour	jaune clair
Odour	inodore

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	32
State	liquide
Temperature (°C)	ambiante
Family name	hydrocarbures aromatiques
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Interference with coastal amenities (E2)	FE - Floater/Evaporator

Human toxicity threshold

TEEL-1 (mg/m3)	75 ppm
TEEL-2 (mg/m3)	600 ppm
TEEL-3 (mg/m3)	3000 ppm

Ecotoxicity

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	1.55

NAPHTHA essence lourde

UN Number: 1268 - CAS Number: 64742-82-1

> **Also known as:** Naphtha (Petroleum), Hydrodesulfurized Heavy, Naphta Lourd (Petrole) Desulfure

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1268
CAS number	64742-82-1

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Boiling Point (°C)	138
Melting Point (°C)	-26
Vapour Pressure (Pa)	200-600 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	229
Flash Point (°C)	38-60
Flash Point (Cleveland open cup) (°C)	47
Lower explosivity limit (LEL) (volume %)	0.6
Upper explosivity limit (UEL) (volume %)	6.5

Behaviour at sea

Additional data

Odour	odeur d'essence

MARPOL pollution category	Category	Description
	Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Package group	II
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.1/3.2/3.

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

IDHL	10000

Hazard statements	**Health**	
	H304	May be fatal if swallowed and enters airways.
	H340	May cause genetic defects. Exposure cause the hazard:
	H350	May cause cancer.
Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P331	Do NOT induce vomiting.
TLV-TWA	100	
TEEL-1 (mg/m3)	300 ppm	
TEEL-2 (mg/m3)	395 ppm	
TEEL-3 (mg/m3)	395 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	2.1

NAPHTHA solvant

UN Number: 1268

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1268

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	860 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	130
Vapour Pressure (Pa)	399 [Pa] at a temperature of 20°C
Lower explosivity limit (LEL) (volume %)	0.8

Behaviour at sea

Persistence (days)	2.7

Additional data

Colour	incolore
Standard behavior classification	FE

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.1/3.2/3.

Reactivity data

Acid(s)	Oui
Base(s)	Oui

Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	10000
TLV-TWA	100

Ecotoxicity

NAPHTHALENE fondu

UN Number: 2304 - CAS Number: 91-20-3

Also known as: Naphthalin, Naphthene, Tar Camphor, White Tar, Naphthalene, Naphtalene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2304
CAS number	91-20-3
Formula	$C_{10}H_8$

Physical chemical data

Physical State (20°C)	Solide
Physical State (25°C)	Solid
Density (kg/m3)	1140 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.96 [cSt] at a temperature of 20°C
Molar mass (g/mol)	128.18
Density of gas (kg/m3)	5.702
Solubility (g/L)	31 [g/L] at a temperature of 25°C and salinity of 0‰ 23 [g/L] at a temperature of 25°C and salinity of 35‰
Boiling Point (°C)	218
Melting Point (°C)	80
Critical molar volume (m³/mol)	0.000407
Critical temperature (°C)	748.5
Critical pressure (Pa)	4050000
Surface tension (mN/m)	31.8 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C 10.5 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	540
Flash Point (°C)	80
Flash Point (Pensky-Martens closed cup) (°C)	88
Flash Point (Cleveland open cup) (°C)	79
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	5.9
Vapor enthalpy (J/Kg)	337052 [J/Kg] at a temperature of 218°C

Combus enthalpy (J/Kg)	38900000
Specific heat capacity (J/(Kg·K))	1292.8
Combustion efficiency (%)	70
Mass flow rate of the combustion surface (Kg/(m²·s))	0.06
Rad fraction (%)	30
Henry's constant (mol/(m³·Pa))	37.85

Behaviour at sea

Log kow	3.7
Log koc	3.13
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	427

Additional data

Colour	incolore
Odour	odeur de naphtaline

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	32
State	liquide
Temperature (°C)	élevée
Pressure (Pa)	ambiante
Family name	hydrocarbures aromatiques
IMO class	4.1

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	500	
Hazard statements	**Physical**	
	H228	Flammable solid.
	Health	
	H302	Harmful if swallowed.
	H351	Suspected of causing cancer.
	Environmental	
	H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P202	Do not handle until all safety precautions have been read and understood.
	P234	Keep only in original container.
	P270	Do no eat, drink or smoke when using this product.
	P273	Avoid release to the environment.
	P281	Use personal protective equipment as required.
	Response	
	P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P370 + P378	In case of fire: Use ... for extinction.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	10
TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	15 ppm
TEEL-3 (mg/m3)	250 ppm

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	2.96
Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.8
Lowest median lethal concentration (LC50) on fishes (mg/l)	1.6
Highest no observed effect concentration (NOEC) on algae (mg/l)	> 4.3
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.5
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.12
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	8 [µg/l] on the short term 1.2 [µg/l] on the long term

NEODECANOATE DE VINYLE

CAS Number: 45115-34-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	45115-34-2

Physical chemical data

Physical State (20°C)	Liquide
Molar mass (g/mol)	198.3
Density of gas (kg/m3)	14.33
Melting Point (°C)	-20
Ignition Temperature (°C)	309
Flash Point (°C)	> 79

Behaviour at sea

Additional data

Colour	incolore
Odour	agréable

Transportation data

Cargo group	13
State	liquide
Temperature (°C)	ambiante
Family name	acétate de vinyle

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui (Cu, Zn)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

NITRATE D'AMMONIUM (substances combustibles >0.2%)

UN Number: 1942

Also known as: AMMONIUM NITRATE (>0.2% combustible substances)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1942

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	80.05
Melting Point (°C)	170

Behaviour at sea

Additional data

Colour	blanc à gris ou brun
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	solide
Family name	acides organiques
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui

Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	10
TEEL-2 (mg/m3)	10
TEEL-3 (mg/m3)	500

Ecotoxicity

NITRATE D'AMMONIUM en solution (< 93%)

UN Number: 2426 - CAS Number: 6484-52-2

> **Also known as:** AMMONIUM NITRATE solution (93% or less), Nitric Acid Ammonium Salt, Ammonium Nitrate, Ammonium Nitrate Solution (93% Or Less), Solutions De Nitrate D'Ammonium (93% Ou Moins)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2426
CAS number	6484-52-2
Formula	NH_4NO_3 (H_2O)

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1720 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	80.1
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	390, decomp.
Melting Point (°C)	170
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore	
Odour	inodore	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
IMO class	5.1

Reactivity data

Water	Non
Abilities	Solution.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Physical**	
	H272	May intensify fire, oxidiser.
	Health	
	H319	Causes serious eye irritation.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P220	Keep/Store away from clothing/.../combustible materials.
	P264	Wash ... thoroughly after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P370 + P378	In case of fire: Use ... for extinction.

TEEL-1 (mg/m3)	10
TEEL-2 (mg/m3)	10
TEEL-3 (mg/m3)	500

Ecotoxicity

NITRATE D'URANYLE

UN Number: 2981

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2981

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2807 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	502.13
Melting Point (°C)	59
Radioactivity (mrems/hr)	5.3

Behaviour at sea

Additional data

Colour	jaune clair

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Oui
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	2 (as U)
TLV-TWA	0.02 (U)
TEEL-1 (mg/m3)	0.993
TEEL-2 (mg/m3)	0.993
TEEL-3 (mg/m3)	16.6

Ecotoxicity

NITRATE DE CALCIUM (solution aqueuse 40-50%)

UN Number: 1454 - CAS Number: 10124-37-5

> **Also known as:** CALCIUM NITRATE (40-50% aqueous solution), CALCIUM (II) NITRATE, Calcium Dinitrate, Lime Nitrate, Calcium Nitrate Solutions (50% Or Less), Solution De Nitrate De Calcium (50% Ou Moins)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1454
CAS number	10124-37-5
Formula	$Ca(NO_3)_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Mixed	Yes
Density (kg/m3)	2500 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	164.1
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	115
Melting Point (°C)	560

Behaviour at sea

Additional data

Colour	incolore à jaune clair	
Odour	inodore	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	D/DE

Transportation data

Package group	III
State	liquide
IMO class	5.1

Reactivity data

Water	Non
Abilities	Solution.
Acid(s)	Oui
Reducing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Hazard statements	**Health**	
	H302	Harmful if swallowed.
	H318	Causes serious eye damage.

Precautionary statements	**Prevention**	
	P264	Wash ... thoroughly after handling.
	P270	Do no eat, drink or smoke when using this product.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P330	Rinse mouth.

TEEL-1 (mg/m3)	3.5
TEEL-2 (mg/m3)	25
TEEL-3 (mg/m3)	125

Ecotoxicity

NITRATE DE MERCURE (I)

UN Number: 1627

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1627

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	280.6

Behaviour at sea

Additional data

Colour	blanc
Odour	odeur légère
Marine pollutant	P
Standard behavior classification	D, SD, FD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non

Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.006 (Pb)
TEEL-1 (mg/m3)	0.0327
TEEL-2 (mg/m3)	0.131
TEEL-3 (mg/m3)	13.1

Ecotoxicity

NITRATE DE PLOMB

UN Number: 1469

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1469

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	4500 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	331.2
Melting Point (°C)	470

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non

Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.02 (Pb)
TEEL-1 (mg/m3)	0.6
TEEL-3 (mg/m3)	160

Ecotoxicity

NITRATE DE THORIUM

UN Number: 2976

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2976

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	990 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	555.2
Radioactivity (mrems/hr)	5.3

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Static electricity	Oui
Oxidizing agents	Non
Reducing agents	Oui
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-2 (mg/m3)	15
TEEL-3 (mg/m3)	25

Ecotoxicity

NITRATE FERRIQUE

UN Number: 1466

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1466

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1700 [Kg/m³] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	vert, incolore à violet
Odour	inodore
Standard behavior classification	SD

Transportation data

Package group	III
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	5 - ≥ 4000
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	0.4 (Fe)
TEEL-1 (mg/m3)	13
TEEL-2 (mg/m3)	21.7
TEEL-3 (mg/m3)	100

Ecotoxicity

NITRATE MERCURIQUE

UN Number: 1625

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1625

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	4390 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	342.6
Melting Point (°C)	79

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	blanc
Odour	odeur prononcée
Marine pollutant	P
Standard behavior classification	SD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.006 (Pb)
TEEL-1 (mg/m3)	0.0405
TEEL-2 (mg/m3)	0.162
TEEL-3 (mg/m3)	16.2

Ecotoxicity

NITRITE DE SODIUM

UN Number: 1500 - CAS Number: 7632-00-0

Also known as: ANTI-RUST, ERINITRIT

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1500
CAS number	7632-00-0

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	69
Boiling Point (°C)	320
Melting Point (°C)	271

Behaviour at sea

Additional data

Colour	blanc
Odour	odeur d'eau de javel
Standard behavior classification	SD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	5.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	0.15
TEEL-3 (mg/m3)	60

Ecotoxicity

NITROBENZENE

UN Number: 1662 - CAS Number: 98-95-3

Also known as: Nitrobenzol, Oil Of Mirbane, Nitrobenzene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1662
CAS number	98-95-3
Formula	$C_6H_5NO_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1204 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	1.6865 [cSt] at a temperature of 20°C 1.5477 [cSt] at a temperature of 25°C
Molar mass (g/mol)	123.11
Density of gas (kg/m3)	7.74
Solubility (g/L)	2090 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	211.1
Melting Point (°C)	5.7
Critical temperature (°C)	720
Critical pressure (Pa)	405300
Surface tension (mN/m)	46.34 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	27 [Pa] at a temperature of 20°C 32.7 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	480
Flash Point (°C)	88
Flash Point (Pensky-Martens closed cup) (°C)	88
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	40
Vapor enthalpy (J/Kg)	352700 [J/Kg] at a temperature of 210.8°C 446755 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	24250000

Specific heat capacity (J/(Kg·K))	1509
Henry's constant (mol/(m³·Pa))	2.43

Behaviour at sea

Persistence (days)	2.7
Log kow	1.85
Log koc	2.35
Aqueous photolysis (Half-life)	133
Bioconcentration factor (BCF)	24

Additional data

Colour	jaune clair à brun	
Odour	odeur d'amande, de cirage	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	SD	

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	43
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	sol. aqueuses diverses
IMO class	6.1

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	200	
Hazard statements	**Health**	
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H331	Toxic if inhaled.
	H351	Suspected of causing cancer.
	H361	Suspected of damaging fertility or the unborn child.
	H372	Causes damage to organs through prolonged or repeated exposure, exposure cause the hazard:
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	Disposal	
	P501	Dispose of contents/container to ...
TEEL-1 (mg/m3)	3 ppm	
TEEL-2 (mg/m3)	19.9 ppm	
TEEL-3 (mg/m3)	200 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	6.68
Lowest median lethal concentration (LC50) on fishes (mg/l)	24.25
Highest no observed effect concentration (NOEC) on algae (mg/l)	3.2
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	2.6

NITROETHANE

UN Number: 2842 - CAS Number: 79-24-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2842
CAS number	79-24-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	75.07
Density of gas (kg/m3)	3.35
Boiling Point (°C)	114
Melting Point (°C)	-90
Vapour Pressure (Pa)	2100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	360
Flash Point (°C)	28
Lower explosivity limit (LEL) (volume %)	3.4
Upper explosivity limit (UEL) (volume %)	40

Behaviour at sea

Additional data

Colour	incolore
Odour	légèrement fruitée
Standard behavior classification	S/SD

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	42
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	composés nitro
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	1000
TLV-TWA	100
TEEL-1 (mg/m3)	100 ppm
TEEL-2 (mg/m3)	200 ppm
TEEL-3 (mg/m3)	1000 ppm

Ecotoxicity

NITROMETHANE

UN Number: 1261

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1261

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1139 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	61.04
Density of gas (kg/m3)	2.709
Boiling Point (°C)	101.4
Melting Point (°C)	-29
Vapour Pressure (Pa)	3600 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	415
Flash Point (°C)	36
Lower explosivity limit (LEL) (volume %)	7.3

Behaviour at sea

Additional data

Colour	incolore
Odour	forte odeur

Transportation data

Package group	II
Cargo group	43
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	sol. aqueuses diverses
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	1000
TLV-TWA	100
TEEL-1 (mg/m3)	60 ppm
TEEL-2 (mg/m3)	750 ppm
TEEL-3 (mg/m3)	750 ppm

Ecotoxicity

NITROPHENOLS

UN Number: 1663

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1663

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1280 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	139.1
Boiling Point (°C)	214
Melting Point (°C)	45
Ignition Temperature (°C)	550
Flash Point (°C)	108

Behaviour at sea

Additional data

Colour	jaune
Odour	odeur aromatique
Standard behavior classification	SD

Transportation data

Package group	III
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	2.5
TEEL-2 (mg/m3)	15
TEEL-3 (mg/m3)	75

Ecotoxicity

NITROTOLUENES mélange

UN Number: 1664

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1664

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100/1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	137.13
Density of gas (kg/m3)	6.06
Boiling Point (°C)	220/238
Melting Point (°C)	-0.192307692
Vapour Pressure (Pa)	34 [Pa] at a temperature of 20°C
Flash Point (°C)	95/100

Behaviour at sea

Additional data

Colour	jaune
Odour	caractéristique

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	42
State	liquide/solide
Temperature (°C)	ambiante
Family name	composés nitro
IMO class	6.1

Reactivity data

Water	Non

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	200

Ecotoxicity

Non-1-Ene

UN Number: 1993 - CAS Number: 27215-95-8

> **Also known as:** Propylene Trimer, Propene Trimer, Pt 3, Olefin Mixture, Nonene, 1-Nonene, Non-1-Ene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1993
CAS number	27215-95-8
Formula	C_9H_{18}

Physical chemical data

Physical State (25°C)	Liquid
Kinematic viscosity (cSt)	0.851 [cSt] at a temperature of 20°C 0.80794 [cSt] at a temperature of 25°C
Molar mass (g/mol)	126.239
Solubility (g/L)	3.6 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	146.9
Melting Point (°C)	-81.3
Critical molar volume (m³/mol)	0.000526
Critical temperature (°C)	594
Critical pressure (Pa)	2431800
Surface tension (mN/m)	22.56 [mN/m] at a temperature of 25°C
Flash Point (Cleveland open cup) (°C)	26
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	3.9
Vapor enthalpy (J/Kg)	287629 [J/Kg] at a temperature of 146.9°C 360586 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	44146000
Specific heat capacity (J/(Kg·K))	2142
Henry's constant (mol/(m³·Pa))	100312

Behaviour at sea

Log kow	4.55
Log koc	2.9

Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	1843

Additional data

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements		
	Physical	
	H226	Flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P331	Do NOT induce vomiting.
	P370 + P378	In case of fire: Use ... for extinction.
	Storage	
	P403 + P235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	3
Highest no observed effect concentration (NOEC) on algae (mg/l)	3.2
Highest no observed effect concentration (NOEC) on fishes (mg/l)	1

NONANES

UN Number: 1920 - CAS Number: 111-84-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1920
CAS number	111-84-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	718 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	128.3
Density of gas (kg/m3)	5.69
Boiling Point (°C)	150.7
Melting Point (°C)	-54
Vapour Pressure (Pa)	430 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	205
Flash Point (°C)	30
Lower explosivity limit (LEL) (volume %)	0.87
Upper explosivity limit (UEL) (volume %)	2.9

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence
Standard behavior classification	FE

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	31
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	paraffines
IMO class	3.3

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	200
TEEL-1 (mg/m3)	600 ppm
TEEL-2 (mg/m3)	1000 ppm
TEEL-3 (mg/m3)	1250 ppm

Ecotoxicity

NONENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	739 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	126.2
Density of gas (kg/m3)	5.676
Boiling Point (°C)	135
Melting Point (°C)	-81
Vapour Pressure (Pa)	543 [Pa] at a temperature of 20°C
Flash Point (°C)	83
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	3.9

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence
Standard behavior classification	FE

Transportation data

Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

NONYLPHENOL

UN Number: 3082 - CAS Number: 25154-52-3

> **Also known as:** 2,6-DIMETHYL-4-HEPTYL PHENOL, Monononylphenol, Phenol, Nonyl, Nonylphenol, N-Nonylphenol (Mixed Isomers), Nonylphenols

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	25154-52-3
Formula	$C_{15}H_{24}O$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	949.4 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	2630 [cSt] at a temperature of 20°C
Molar mass (g/mol)	220.36
Density of gas (kg/m3)	9.804
Solubility (g/L)	6 [g/L] at a temperature of 20°C and salinity of 0‰ 4 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	304
Melting Point (°C)	140
Interfacial tension (mN/m)	30 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	50 [Pa] at a temperature of 20°C 0.3 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	370
Flash Point (°C)	140
Flash Point (Pensky-Martens closed cup) (°C)	141
Flash Point (Cleveland open cup) (°C)	141
Combus enthalpy (J/Kg)	38200000
Combustion efficiency (%)	70
Mass flow rate of the combustion surface (Kg/(m²·s))	0.036
Rad fraction (%)	30
Henry's constant (mol/(m³·Pa))	11.02

Behaviour at sea

Log kow	4.48
Log koc	3.7
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	150
Bioconcentration factor (BCF)	1280

Additional data

Colour	jaune clair, couleur paille
Odour	odeur de médicaments

MARPOL pollution category

Category	Description
X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Package group	II
Cargo group	40
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	glycol éthers

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	5 - Very highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	3 - High
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	1 - Mildly irritating

Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	20
TEEL-2 (mg/m3)	125
TEEL-3 (mg/m3)	500

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	0.027
Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.021
Lowest median lethal concentration (LC50) on fishes (mg/l)	0.017
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.0251
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.0039
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.006
Assessment factor (AF)	10 on the short term 10 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1.7 [µg/l] on the short term 0.39 [µg/l] on the long term

o-CHLORONITROBENZENE

UN Number: 1578 - CAS Number: 25167-93-5

Also known as: 1-CHLORO-2-NITROBENZENE, 2-CHLORONITROBENZENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1578
CAS number	25167-93-5

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1400 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	157.56
Density of gas (kg/m3)	6.97
Boiling Point (°C)	246
Melting Point (°C)	32.5
Vapour Pressure (Pa)	600 [Pa] at a temperature of 20°C
Flash Point (°C)	124

Behaviour at sea

Additional data

Colour	jaune-vert
Odour	aromatique

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	42
State	solide
Temperature (°C)	froide
Family name	composés nitro
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

o-CHLOROTOLUENE

UN Number: 2338 - CAS Number: 95-49-8

Also known as: 2-CHLORO-1-METHYLBENZENE, 2-CHLOROTOLUENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2338
CAS number	95-49-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1080 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	126.59
Boiling Point (°C)	157/159
Melting Point (°C)	1.058823529
Vapour Pressure (Pa)	359 [Pa] at a temperature of 20°C
Flash Point (°C)	46/47

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
State	liquide
Family name	hydrocarbures halogénés
IMO class	3.3

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

o-ETHYLPHENOL

CAS Number: 90-00-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	90-00-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1037 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	122.17
Density of gas (kg/m3)	5.43
Boiling Point (°C)	195/197
Melting Point (°C)	-18
Vapour Pressure (Pa)	< 130 [Pa] at a temperature of 20°C
Flash Point (°C)	78

Behaviour at sea

Additional data

Colour	jaune
Odour	inodore

Transportation data

Cargo group	21
State	liquide
Temperature (°C)	ambiante
Family name	phénols, crésols

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly

Human toxicity threshold

Ecotoxicity

OCTANOL

UN Number: 3082 - CAS Number: 111-87-5

> **Also known as:** ALCOHOL C-8, ALFOL 8, CAPRYL ALCOHOL, n-CAPRYLIC ALCOHOL, DYTOL M-83, EPAL 8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	111-87-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	829 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.23
Density of gas (kg/m3)	5.805
Boiling Point (°C)	195
Melting Point (°C)	-16
Vapour Pressure (Pa)	20260 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	270
Flash Point (°C)	81
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	7.4

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

OCTENE-1

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	715 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	112.22
Density of gas (kg/m3)	5.03
Boiling Point (°C)	121.5
Melting Point (°C)	-101
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	256
Flash Point (°C)	-7
Lower explosivity limit (LEL) (volume %)	0.7
Upper explosivity limit (UEL) (volume %)	3.9

Behaviour at sea

Persistence (days)	0.8

Additional data

Colour	incolore
Odour	odeur d'essence
Standard behavior classification	E, FE, F

Transportation data

Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines

Reactivity data

Water	Non

Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

ERPG-1 (ppm)	40
ERPG-2 (ppm)	800
ERPG-3 (ppm)	2000

Ecotoxicity

OLEATE DE POTASSIUM

CAS Number: 143-18-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	143-18-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	320.57

Behaviour at sea

Additional data

Colour	limpide à ambré trouble
Odour	odeur de savon

Transportation data

Cargo group	34
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible

Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

OLEUM (20 à 65% de SO3 libre)

UN Number: 1831

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1831

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1920/1990 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	80.1 (pure)
Density of gas (kg/m3)	3.48
Boiling Point (°C)	55/139
Vapour Pressure (Pa)	900 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à brun
Odour	irritante, piquante, choquante

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui (cast iron)
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui

Organic substance	Oui

GESAMP Hazard profile

Skin irritation/corrosivity (D1)	3C - Corrosive

Human toxicity threshold

IDHL	15 mg/m3
TLV-TWA	1 mg/m3
ERPG-2 (ppm)	10
ERPG-3 (ppm)	30

Ecotoxicity

OXYCHLORURE DE PHOSPHORE

UN Number: 1810

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1810

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1675 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	153.33
Density of gas (kg/m3)	6.837
Boiling Point (°C)	107
Vapour Pressure (Pa)	3700 [Pa] at a temperature of 20°C
Upper explosivity limit (UEL) (volume %)	12.4

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore à jaune clair
Odour	odeur de moisi
Standard behavior classification	D, SD

Transportation data

Package group	II
State	liquide
Temperature (°C)	> 2°
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non

Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.5
TEEL-1 (mg/m3)	0.479 ppm
TEEL-2 (mg/m3)	0.479 ppm
TEEL-3 (mg/m3)	0.85

Ecotoxicity

OXYDE D'ETHYLENE (< 0.2% azote)

UN Number: 1040 - CAS Number: 75-21-8

> **Also known as:** ANPROLENE (T), DIHYDROOXIRANE, DIMETHYLENE OXIDE, 1,2-EPOXYETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1040
CAS number	75-21-8

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.935 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	44.05
Density of gas (kg/m3)	1.935
Boiling Point (°C)	10.8
Melting Point (°C)	-112
Vapour Pressure (Pa)	150000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	440
Flash Point (°C)	-18
Upper explosivity limit (UEL) (volume %)	100

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce
Standard behavior classification	GD

Transportation data

Transport mode	Gaz,Colis
Ship type	1G
State	liq.compr.gas
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
IMO class	2(2.3)

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	GD - Gas/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	800
ERPG-2 (ppm)	50
ERPG-3 (ppm)	500

Ecotoxicity

OXYDE DE BUTYLENE-1,2 stabilisé

UN Number: 3022 - CAS Number: 106-88-7

> **Also known as:** BUTANE, 1,2-EPOXY, 1-BUTENE OXIDE, BUTYLENE OXIDE, 1,2-BUTYLENE OXIDE stabilized, 1,2-EPOXY BUTANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3022
CAS number	106-88-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	826 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	72
Density of gas (kg/m3)	3.225
Boiling Point (°C)	63
Melting Point (°C)	-150
Vapour Pressure (Pa)	19329 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	550
Flash Point (°C)	-15
Lower explosivity limit (LEL) (volume %)	1.5
Upper explosivity limit (UEL) (volume %)	25.1

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur prononcée
Standard behavior classification	ED

Transportation data

Package group	II
Cargo group	16

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pression - vacuum
Family name	oxydes d'alkylenes
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	75
TEEL-2 (mg/m3)	200
TEEL-3 (mg/m3)	200

Ecotoxicity

OXYDE DE FER résiduaire

UN Number: 1376

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1376

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	5240 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	159.69
Melting Point (°C)	1565

Behaviour at sea

Additional data

Colour	rouge à rouge-brun
Odour	inodore

Transportation data

Package group	III
State	solide
IMO class	4.2

Reactivity data

Water	Non
Metal(s) and alloys	Non
Oxidizing agents	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	40

TEEL-3 (mg/m3)	250

Ecotoxicity

OXYDE DE MERCURE

UN Number: 1641

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1641

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	11100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	216.61
Melting Point (°C)	500

Behaviour at sea

Persistence (days)	3.1

Additional data

Colour	rouge, orange, jaune
Odour	inodore
Marine pollutant	P

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.005 (Pb)

TEEL-1 (mg/m3)	0.026
TEEL-2 (mg/m3)	0.104
TEEL-3 (mg/m3)	10.4

Ecotoxicity

OXYDE DE MESITYLE

UN Number: 1229 - CAS Number: 141-79-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1229
CAS number	141-79-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	853 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.2
Density of gas (kg/m3)	4.386
Boiling Point (°C)	130
Melting Point (°C)	-59
Vapour Pressure (Pa)	1000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	340
Flash Point (°C)	31
Lower explosivity limit (LEL) (volume %)	1.3
Upper explosivity limit (UEL) (volume %)	8.8

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	menthe forte, miel
Standard behavior classification	FED

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	18
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
Family name	cétones
IMO class	3.3

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	5000
TLV-TWA	15
TEEL-1 (mg/m3)	25 ppm
TEEL-2 (mg/m3)	25ppm
TEEL-3 (mg/m3)	1400 ppm

Ecotoxicity

OXYDE DE PROPYLENE

UN Number: 1280 - CAS Number: 75-56-9

> **Also known as:** 1,2-EPOXYPROPANE, 2-Methyloxirane, Propene Oxide, Epoxypropane, Methyloxirane, Propylene Oxide, Oxyde De Propylene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1280
CAS number	75-56-9
Formula	C_3H_6O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	830 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	58.08
Density of gas (kg/m3)	2.58
Boiling Point (°C)	34.5
Melting Point (°C)	-112
Critical molar volume (m³/mol)	0.00019
Vapour Pressure (Pa)	59851 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	430
Flash Point (°C)	-37
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	38.5

Behaviour at sea

Log kow	0.03
Log koc	0.72
Biodegradation in estuary environment (Half-life) (days)	11.6
Bioconcentration factor (BCF)	3

Additional data

Colour	incolore

Odour	douce odeur d'alcool	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	DE	

Transportation data

Transport mode	Vrac,Gaz,Colis
Ship type	2G,2PG
Cargo group	16
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	oxydes d'alkylène
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2000	
Hazard statements	**Physical**	
	H224	Extremely flammable liquid and vapour.
	Health	
	H312	Harmful in contact with skin.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H340	May cause genetic defects. Exposure cause the hazard:
	H350	May cause cancer.
Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	20	
ERPG-1 (ppm)	50	
ERPG-2 (ppm)	250	
ERPG-3 (ppm)	750	

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	52
Highest no observed effect concentration (NOEC) on fishes (mg/l)	141

Assessment factor (AF)	1000 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	52 [µg/l] on the short term

PARALDEHYDE

UN Number: 1264 - CAS Number: 123-63-7

Also known as: p-ACETALDEHYDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1264
CAS number	123-63-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	990 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	132.16
Density of gas (kg/m3)	5.93
Boiling Point (°C)	124
Melting Point (°C)	12
Vapour Pressure (Pa)	3330 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	235
Flash Point (°C)	17
Lower explosivity limit (LEL) (volume %)	1.3

Behaviour at sea

Additional data

Colour	incolore
Odour	aromatique

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	19
State	liquide
Temperature (°C)	ambiante

Family name	aldéhydes
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	30
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	500

Ecotoxicity

PARATHION liquide

UN Number: 3018

> **Also known as:** APHAMITE, BLADAN, COROTHION, DANATHION, DNTP, EKATOX

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3018

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1269 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	291.3
Boiling Point (°C)	375
Flash Point (°C)	120

Behaviour at sea

Persistence (days)	3.1

Additional data

Colour	brun clair à foncé
Odour	odeur caractéristique
Marine pollutant	P

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non

Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	1,5
TLV-TWA	0.008
TEEL-1 (mg/m3)	0.15
TEEL-3 (mg/m3)	10

Ecotoxicity

PENTACHLOROETHANE

UN Number: 1669 - CAS Number: 76-01-7

Also known as: ETHANE PENTACHLORIDE, ETHANE, PENTACHLORO-

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1669
CAS number	76-01-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1673 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	202.3
Density of gas (kg/m3)	9.03
Boiling Point (°C)	160.5
Melting Point (°C)	-22
Vapour Pressure (Pa)	453 (25C) [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur de chloroforme

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

Water	Non
Base(s)	Oui
Metal(s) and alloys	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	30
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

PENTACHLOROPHENATE DE SODIUM

UN Number: 2567

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2567

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	288.35
Boiling Point (°C)	decomp.

Behaviour at sea

Additional data

Colour	couleur chamois
Odour	pheNonlique
Marine pollutant	P
Standard behavior classification	SD/D

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

Water	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	3.5

TEEL-2 (mg/m3)	24
TEEL-3 (mg/m3)	75

Ecotoxicity

PENTACHLOROPHENOL

UN Number: 3155

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3155

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1980 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	266.35
Boiling Point (°C)	310
Melting Point (°C)	188
Vapour Pressure (Pa)	20 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	blanc à brun clair
Odour	inodore
Marine pollutant	P

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
IMO class	6.1

Reactivity data

Water	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	0,225
TLV-TWA	0.045
TEEL-1 (mg/m3)	2.5
TEEL-2 (mg/m3)	2.5
TEEL-3 (mg/m3)	2.5

Ecotoxicity

PENTACHLORURE D'ANTIMOINE liquide

UN Number: 1730

> **Also known as:** ANTIMONY CHLORIDE, ANTIMONY PENTACHLORIDE liquid, ANTIMONY PERCHLORIDE, BUTTER OF ANTIMONY

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1730

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	2354 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	299.05
Boiling Point (°C)	175
Melting Point (°C)	-3
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore à brun
Odour	odeur désagréable
Standard behavior classification	D, SD

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui

Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	16 (as Sb)
TLV-TWA	0.1 (Sb)
TEEL-1 (mg/m3)	3.68
TEEL-2 (mg/m3)	6.14
TEEL-3 (mg/m3)	123

Ecotoxicity

PENTAETHYLENEHEXAMINE

CAS Number: 4067-16-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	4067-16-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1000 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	232.38
Boiling Point (°C)	350/390
Ignition Temperature (°C)	360
Flash Point (°C)	175/207

Behaviour at sea

Additional data

Colour	jaunâtre
Odour	odeur ammoniacale
Standard behavior classification	D/DE

Transportation data

Temperature (°C)	ambiante
Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000

Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

PENTAFLUORURE D'ANTIMOINE

UN Number: 1732

Also known as: ANTIMONY (V) FLUORIDE, ANTIMONY PENTAFLUORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1732

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	2340 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	216.7
Boiling Point (°C)	143
Melting Point (°C)	8.3
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	2.7

Additional data

Colour	incolore
Odour	odeur prononcée
Standard behavior classification	D, SD

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui
Acid(s)	Non

Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Oui
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	16 (as Sb)
TLV-TWA	0.1 (Sb)
TEEL-1 (mg/m3)	0.89
TEEL-2 (mg/m3)	2.7
TEEL-3 (mg/m3)	89

Ecotoxicity

PENTANES

UN Number: 1265

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1265

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	620 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	72.15
Density of gas (kg/m3)	3.225
Boiling Point (°C)	28.1
Melting Point (°C)	-160
Vapour Pressure (Pa)	99000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	420
Flash Point (°C)	-20
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	7.6

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence

Transportation data

Transport mode	Vrac,Colis
Package group	I/II
Cargo group	31
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	paraffines

IMO class	3.1

Reactivity data

Water	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	610 ppm
TEEL-2 (mg/m3)	610 ppm
TEEL-3 (mg/m3)	20000 ppm

Ecotoxicity

PERCHLOROETHYLENE

UN Number: 1897 - CAS Number: 127-18-4

> **Also known as:** Ethylene Tetrachloride, Pce, Perc, Perchlor, Perchlorethylene, Perchloroethylene, Perk, Tetrachloroethene, Tetrachlorethylene, 1,1,2,2-Tetrachloroethylene, Tetrachloroethylene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1897
CAS number	127-18-4
Formula	C_2Cl_4

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1620 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.54 [cSt] at a temperature of 20°C 0.52 [cSt] at a temperature of 25°C
Molar mass (g/mol)	165.83
Density of gas (kg/m3)	7.4
Solubility (g/L)	149 [g/L] at a temperature of 20°C and salinity of 0‰ 209 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	121
Melting Point (°C)	-23
Surface tension (mN/m)	32.1 [mN/m] at a temperature of 20°C
Interfacial tension (mN/m)	44.4 [mN/m] at a temperature of 25°C and salinity of 0‰
Vapour Pressure (Pa)	1900 [Pa] at a temperature of 20°C 2481 [Pa] at a temperature of 25°C
Vapor enthalpy (J/Kg)	209105 [J/Kg] at a temperature of 121.2°C 23952 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	4440000
Specific heat capacity (J/(Kg·K))	864.64
Combustion efficiency (%)	50
Mass flow rate of the combustion surface (Kg/(m²·s))	0.03
Rad fraction (%)	40

Henry's constant (mol/(m³·Pa))	2114

Behaviour at sea

Log kow	2.53
Log koc	1.98
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	270
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	103

Additional data

Colour	incolore
Odour	douce

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
State	liquide
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	150	
Hazard statements	**Health**	
	H335	May cause respiratory irritation.
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P202	Do not handle until all safety precautions have been read and understood.
	P273	Avoid release to the environment.
	P281	Use personal protective equipment as required.
	Response	
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P391	Collect spillage.
	Storage	
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	50	
ERPG-1 (ppm)	100	
ERPG-2 (ppm)	200	
ERPG-3 (ppm)	1000	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	3.64
Lowest median lethal concentration (LC50) on crustacean (mg/l)	8.5
Lowest median lethal concentration (LC50) on fishes (mg/l)	5

Highest no observed effect concentration (NOEC) on algae (mg/l)	1.77
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.51
Highest no observed effect concentration (NOEC) on fishes (mg/l)	1.99
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	36.4 [µg/l] on the short term 5.1 [µg/l] on the long term

PERMANGANATE DE CALCIUM

UN Number: 1456

Also known as: CALCIUM PERMANGANATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1456

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2400 [Kg/m³] at a temperature of 20°C

Behaviour at sea

Additional data

Standard behavior classification	SD

Transportation data

Package group	II
State	solide
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

PERMETHRIN

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1920 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	391.28
Boiling Point (°C)	200 (1.33 Pa)
Melting Point (°C)	34/35
Vapour Pressure (Pa)	0.000045 [Pa] at a temperature of 20°C
Flash Point (°C)	> 100

Behaviour at sea

Additional data

Colour	brun pâle

Transportation data

Reactivity data

Water	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

PEROXYDE D'HYDROGENE en solution (8 à 60%)

UN Number: 2014 - CAS Number: 7722-84-1

Also known as: EAU OXYGENEE, Hydroperoxide, Hydrogen Peroxide, Peroxyde D'Hydrogene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2014
CAS number	7722-84-1
Formula	H_2O_2

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1000/1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	34.01 (pure)
Density of gas (kg/m3)	1.29/1.55
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	100/114
Melting Point (°C)	-50
Critical temperature (°C)	728
Critical pressure (Pa)	22000000
Surface tension (mN/m)	80.4 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	40/100 [Pa] at a temperature of 20°C 262.6 [Pa] at a temperature of 25°C
Vapor enthalpy (J/Kg)	1517000 [J/Kg] at a temperature of 25°C
Specific heat capacity (J/(Kg·K))	2619
Henry's constant (mol/(m³·Pa))	0.0007

Behaviour at sea

Log kow	-1.57
Log koc	1.12

Additional data

Colour	incolore
Odour	légèrement piquante

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	I/II
State	liquide
Temperature (°C)	ambiante
IMO class	5.1

Reactivity data

Water	Non
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver

Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	75	
Hazard statements	**Physical**	
	H271	May cause fire or explosion, strong oxidiser.
	Health	
	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P370 + P378	In case of fire: Use ... for extinction.
ERPG-1 (ppm)	10	
ERPG-2 (ppm)	50	
ERPG-3 (ppm)	100	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	2.4
Lowest median lethal concentration (LC50) on fishes (mg/l)	0.1
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.1
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.61
Highest no observed effect concentration (NOEC) on fishes (mg/l)	5
Assessment factor (AF)	50 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	10 [µg/l] on the short term

PEROXYDE D'HYDROGENE stabilisé

UN Number: 2015

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2015

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1290 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	34.01
Density of gas (kg/m3)	1.548
Boiling Point (°C)	125
Melting Point (°C)	-30
Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur

Transportation data

Transport mode	Vrac,Colis
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	5.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	75
ERPG-1 (ppm)	10
ERPG-2 (ppm)	50
ERPG-3 (ppm)	100

Ecotoxicity

PEROXYDE DE DI-tert-BUTYLE

UN Number: 2102

Also known as: DI-tertiary-BUTYL PEROXIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2102

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	146.2
Density of gas (kg/m3)	6.579
Boiling Point (°C)	80
Melting Point (°C)	-30
Vapour Pressure (Pa)	2800 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Standard behavior classification	FE

Transportation data

Package group	II
State	liquide
IMO class	5.2

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

PEROXYDE DE SODIUM

UN Number: 1504

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1504

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	78
Boiling Point (°C)	657
Melting Point (°C)	460

Behaviour at sea

Additional data

Colour	jaune clair

Transportation data

State	solide
Temperature (°C)	ambiant
IMO class	5.1

Reactivity data

Water	Oui
Metal(s) and alloys	Oui (light metals)
Reducing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	10

TEEL-2 (mg/m3)	10
TEEL-3 (mg/m3)	10

Ecotoxicity

PETROLE ET DISTILLATS DE PETROLE

UN Number: 1268

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1268

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	760 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	75
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Flash Point (°C)	-18

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence

Transportation data

Transport mode	Vrac,Colis
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.1/3.2/3.

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	10000
TLV-TWA	400

Ecotoxicity

PHENOL

UN Number: 1671 - CAS Number: 108-95-2

> **Also known as:** ACID CARBOLIC, BAKER P & S LIQUID OINTMENT, BENZENOL, CARBOLIC ACID, CARBOLSÄURE, Hydroxybenzene, Monohydroxybenzene, Oxybenzene, Phenic Acid, Phenyl Alcohol, Phenylic Acid, Phenylic Alcohol, Phenyl Hydrate, Phenyl Hydroxide, Acide Carbolique, Phenol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1671
CAS number	108-95-2
Formula	C_6H_6O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Solid
Density (kg/m3)	1058 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	3.26 [cSt] at a temperature of 20°C
Molar mass (g/mol)	94.11
Density of gas (kg/m3)	4.18
Solubility (g/L)	84000 [g/L] at a temperature of 20°C and salinity of 0‰ 86600 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	182
Melting Point (°C)	41
Vapour Pressure (Pa)	35455 [Pa] at a temperature of 20°C 46.6 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	605
Flash Point (°C)	79
Flash Point (Pensky-Martens closed cup) (°C)	79
Flash Point (Cleveland open cup) (°C)	85
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	8.6
Vapor enthalpy (J/Kg)	485496 [J/Kg] at a temperature of 181.8°C 614387 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	31000000

Specific heat capacity (J/(Kg·K))	2123
Combustion efficiency (%)	89
Mass flow rate of the combustion surface (Kg/(m²·s))	0.04
Rad fraction (%)	33
Henry's constant (mol/(m³·Pa))	0.02

Behaviour at sea

Log kow	1.47
Log koc	1.59
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	17.5

Additional data

Colour	blanc, rose clair	
Odour	odeur douce, de goudron	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	DE	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	21
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	phenols, crésols
IMO class	6.1

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	250	
Hazard statements	**Health**	
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H331	Toxic if inhaled.
	H341	Suspected of causing genetic defects.
	H373	May cause damage to organs through prolonged or repeated exposure, exposure cause the hazard:

Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P331	Do NOT induce vomiting.

ERPG-1 (ppm)	10
ERPG-2 (ppm)	50
ERPG-3 (ppm)	200

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	49.6
Lowest median lethal concentration (LC50) on crustacean (mg/l)	3.1
Lowest median lethal concentration (LC50) on fishes (mg/l)	5
Highest no observed effect concentration (NOEC) on algae (mg/l)	13
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.46
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.077
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	31 [µg/l] on the short term 0.77 [µg/l] on the long term

PHENOL fondu

UN Number: 2312 - CAS Number: 108-95-2

Also known as: CARBOLIC ACID

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2312
CAS number	108-95-2

Physical chemical data

Physical State (20°C)	Liquide/Solide
Density (kg/m3)	1070 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	94.11
Density of gas (kg/m3)	4.21
Boiling Point (°C)	182
Melting Point (°C)	15/41
Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	605
Flash Point (°C)	79
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	8.6

Behaviour at sea

Additional data

Colour	blanc à rose
Odour	douce odeur de goudron

Transportation data

Package group	II
Cargo group	21
Family name	phénols, crésols
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	250
ERPG-1 (ppm)	10
ERPG-2 (ppm)	50
ERPG-3 (ppm)	200

Ecotoxicity

PHOSGENE

UN Number: 1076

> **Also known as:** CARBONIC CHLORIDE, CARBON OXYCHLORIDE, CARBONYL CHLORIDE, CHLOROFORMYL CHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1076

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	4.4 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	98.9
Melting Point (°C)	-13
Vapour Pressure (Pa)	160000 [Pa] at a temperature of 20°C
Flash Point (°C)	999

Behaviour at sea

Additional data

Transportation data

IMO class	2(2.3)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.1					
ERPG-2 (ppm)	0.2					
	10 min	**30 min**	**60 min**	**4 hrs**	**8 hrs**	

AEGL-2 (ppm)	0.6	0.6	0.3	0.08	0.04
AEGL-3 (ppm)	3.6	1.5	0.75	0.2	0.09

Ecotoxicity

PHOSPHATE ACIDE DE DIISOOCTYLE

UN Number: 1902

Also known as: DIISOOCTYL ACID PHOSPHATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1902

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	977 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	322.4

Behaviour at sea

Additional data

Colour	jaune clair
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non

Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	25
TEEL-2 (mg/m3)	150
TEEL-3 (mg/m3)	500

Ecotoxicity

PHOSPHATE DE TRIBUTYLE

CAS Number: 126-73-8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	126-73-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	980 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	266.3
Density of gas (kg/m3)	11.87
Boiling Point (°C)	289 (decomp.)
Melting Point (°C)	< -80
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	410
Flash Point (°C)	146
Lower explosivity limit (LEL) (volume %)	1.3
Upper explosivity limit (UEL) (volume %)	7.1

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	inodore

Transportation data

Cargo group	34
State	liquide
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui

Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	30
TLV-TWA	0.2
TEEL-1 (mg/m3)	2 ppm
TEEL-2 (mg/m3)	15 ppm
TEEL-3 (mg/m3)	30 ppm

Ecotoxicity

PHOSPHATE DE TRICRESYLE (1% d'isomère ortho)

UN Number: 2574 - CAS Number: 1330-78-5

Also known as: o-CRESYLPHOSPHATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2574
CAS number	1330-78-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	368.4
Density of gas (kg/m3)	16.38
Boiling Point (°C)	410
Melting Point (°C)	-25
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	385
Flash Point (°C)	223

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Marine pollutant	P

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	34

State	liquide
Temperature (°C)	ambiante
Family name	esters
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	4 - Very high
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	0.0065
TEEL-1 (mg/m3)	0.3 ppm
TEEL-2 (mg/m3)	0.6 ppm
TEEL-3 (mg/m3)	40 ppm

Ecotoxicity

PHOSPHATE DE TRICRESYLE (>3% d'isomère ortho)

UN Number: 2574

Also known as: DURAD (T)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2574

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1160 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	368
Density of gas (kg/m3)	16.77
Boiling Point (°C)	410
Melting Point (°C)	-30
Vapour Pressure (Pa)	1333 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	400
Flash Point (°C)	210

Behaviour at sea

Persistence (days)	3.1

Additional data

Colour	colourless
Odour	sweet odour
Marine pollutant	P

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.3 ppm
TEEL-2 (mg/m3)	0.6 ppm
TEEL-3 (mg/m3)	40 ppm

Ecotoxicity

PHOSPHATE DE TRIETHYLE

CAS Number: 78-40-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	78-40-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1070 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	182.16
Density of gas (kg/m3)	8.1
Boiling Point (°C)	209
Melting Point (°C)	-56.4
Vapour Pressure (Pa)	34 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	452
Flash Point (°C)	116
Lower explosivity limit (LEL) (volume %)	1.7
Upper explosivity limit (UEL) (volume %)	10

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Oui

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	200
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

PHOSPHATE DE TRIMETHYLE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1197 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	140.07
Boiling Point (°C)	197
Melting Point (°C)	-46
Vapour Pressure (Pa)	110 [Pa] at a temperature of 20°C
Flash Point (°C)	107

Behaviour at sea

Additional data

Transportation data

State	liquide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	60 ppm
TEEL-3 (mg/m3)	60 ppm

Ecotoxicity

PHOSPHATE DE TRIXYLYLE

UN Number: 3082 - CAS Number: 25155-23-1

Also known as: COALITE NTP, DIMETHYLPHENOL PHOSPHATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	25155-23-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1130/1155 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	410.4
Density of gas (kg/m3)	18.32
Boiling Point (°C)	248/265
Melting Point (°C)	-20
Ignition Temperature (°C)	343
Flash Point (°C)	199

Behaviour at sea

Additional data

Colour	légèrement coloré
Odour	légère

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

PHOSPHATES DE PHENYLE TRIISOPROPYLEES

UN Number: 3082 - CAS Number: 68937-41-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	68937-41-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1100 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	220/270
Melting Point (°C)	-26
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	510/550
Flash Point (°C)	200/245

Behaviour at sea

Additional data

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	5 - ≥ 4000
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

Ecotoxicity

PHOSPHINE

UN Number: 2199

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2199

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.5 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	34
Boiling Point (°C)	-87.7
Melting Point (°C)	-133
Vapour Pressure (Pa)	4200000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	38
Flash Point (°C)	999
Lower explosivity limit (LEL) (volume %)	1.8

Behaviour at sea

Additional data

Transportation data

IMO class	2(2.3)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	200
TLV-TWA	0.3
ERPG-2 (ppm)	0.5

	10 min	30 min	60 min	4 hrs	8 hrs
AEGL-2 (ppm)				0.5	0.25
AEGL-3 (ppm)	7.2	7.2	3.6	0.9	0.45

Ecotoxicity

PHOSPHITE DE TRIETHYLE

UN Number: 2323 - CAS Number: 122-52-1

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2323
CAS number	122-52-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	970 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	166.16
Density of gas (kg/m3)	7.39
Boiling Point (°C)	155
Vapour Pressure (Pa)	131 [Pa] at a temperature of 20°C
Flash Point (°C)	44

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	F/FD

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters
IMO class	3.3

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	Ss - Skin Sensitization
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	6 ppm
TEEL-2 (mg/m3)	40 ppm
TEEL-3 (mg/m3)	200 ppm

Ecotoxicity

PHOSPHITE DE TRIMETHYLE

UN Number: 2329 - CAS Number: 121-45-9

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2329
CAS number	121-45-9

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1046 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	124.08
Density of gas (kg/m3)	5.55
Boiling Point (°C)	111
Melting Point (°C)	-78
Vapour Pressure (Pa)	3200 (25C) [Pa] at a temperature of 20°C
Ignition Temperature (°C)	250
Flash Point (°C)	28

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur irritante de pyridine

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Family name	esters
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly

Human toxicity threshold

TEEL-1 (mg/m3)	60 ppm
TEEL-2 (mg/m3)	500 ppm
TEEL-3 (mg/m3)	750 ppm

Ecotoxicity

PHOSPHORE (blanc, fondu)

UN Number: 2447 - CAS Number: 7732-14-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2447
CAS number	7732-14-0

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	123.89
Density of gas (kg/m3)	5.676
Boiling Point (°C)	279.9
Melting Point (°C)	44
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	30
Flash Point (°C)	30

Behaviour at sea

Additional data

Colour	jaune clair
Odour	odeur d'aïl
Marine pollutant	P

Transportation data

Transport mode	Vrac,Colis
State	liquide, wax
Temperature (°C)	élevée
Pressure (Pa)	pressurisé
IMO class	4.2

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	6 - Extremely toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	4 - Very high
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	0.02
TEEL-1 (mg/m3)	0.125
TEEL-2 (mg/m3)	0.75

Ecotoxicity

PHOSPHURE D'ALUMINIUM

UN Number: 1397

Also known as: AIP, ALUMINIUM MONOPHOSPHIDE, ALUMINIUM PHOSPHIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1397

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2850 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	57.96
Melting Point (°C)	> 1000

Behaviour at sea

Additional data

Colour	gris foncé ou jaune foncé
Odour	odeur de poisson

Transportation data

State	solide
IMO class	4.3

Reactivity data

Water	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.907 ppm

TEEL-2 (mg/m3)	2 ppm
TEEL-3 (mg/m3)	3.6 ppm

Ecotoxicity

PHOSPHURE DE MAGNESIUM

UN Number: 2011

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2011

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2060 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	134.86
Boiling Point (°C)	1000, decomp.
Melting Point (°C)	>750

Behaviour at sea

Additional data

Transportation data

State	solide
IMO class	4.3

Reactivity data

Water	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.6 ppm
TEEL-2 (mg/m3)	1 ppm
TEEL-3 (mg/m3)	1.8 ppm

Ecotoxicity

PHOSPHURE DE ZINC

UN Number: 1714

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1714

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	4600 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	258.1
Boiling Point (°C)	1100
Melting Point (°C)	420

Behaviour at sea

Additional data

Colour	gris à noir
Standard behavior classification	SD

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	4.3

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non

Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.15 ppm
TEEL-2 (mg/m3)	1 ppm
TEEL-3 (mg/m3)	1.8 ppm

Ecotoxicity

PHTALATE DE BUTYLBENZYLE

UN Number: 3082

> **Also known as:** BENZENE-1,2-DICARBOXYLIC ACID, BENZYL BUTYL ESTER, BENZYL-n-BUTYL PHTHALATE, BUTYL BENZYL PHTHALATE, BUTYL PHENYLMETHYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1120 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	313
Density of gas (kg/m3)	13.945
Boiling Point (°C)	370
Melting Point (°C)	1.285714286
Vapour Pressure (Pa)	< 0.1 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	435
Flash Point (°C)	199

Behaviour at sea

Additional data

Colour	incolore
Odour	légère

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Specific Health Concern (D3)	R - Reprotoxicity
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

PHTALATE DE DIBUTYLE

UN Number: 3082

> **Also known as:** o-BENZENE DICARBOXYLIC ACID DIBUTYL ESTER, BENZENE-o-DICARBOXYLIC ACID DI-N-BUTYL ESTER, BUTYL PHTHALATE, CELLUFLEX DPB, DBP (T), DIBUTYL 1,2-BENZENE DICARBOXYLATE, DI-(normal)-BUTYL PHTHALATE, DI-N-BUTYL PHTHALATE, DIBUTYL PHTHALATE, ELAOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1049 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	278.35
Boiling Point (°C)	335
Melting Point (°C)	-35
Vapour Pressure (Pa)	446556 [Pa] at a temperature of 20°C
Flash Point (°C)	180
Lower explosivity limit (LEL) (volume %)	0.5
Upper explosivity limit (UEL) (volume %)	2.5

Behaviour at sea

Persistence (days)	1.9

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	34
State	liquide
Family name	esters

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	800
TLV-TWA	0.4

Ecotoxicity

PHTALATE DE DIETHYLENEGLYCOL

Also known as: DIETHYLENE GLYCOL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1150 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	254.23
Boiling Point (°C)	> 240
Melting Point (°C)	< -20
Vapour Pressure (Pa)	< 4000 [Pa] at a temperature of 20°C
Flash Point (°C)	93.3

Behaviour at sea

Additional data

Colour	jaune pâle
Odour	inodore
Standard behavior classification	S/SD

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

PHTALATE DE DIHEPTYLE

CAS Number: 3648-21-3

Also known as: DIHEPTYL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	3648-21-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	988 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	362.51
Boiling Point (°C)	360
Melting Point (°C)	-46
Flash Point (°C)	224

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

PHTALATE DE DIHEXYLE

CAS Number: 84-75-3

> **Also known as:** 1,2-BENZENEDICARBOXYLIC ACID, DIHEXYL ESTER, DIHEXYL PHTHALATE, DI-n-HEXYL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	84-75-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	995 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	334.5
Boiling Point (°C)	> 210 (666 Pa)
Melting Point (°C)	-58
Flash Point (°C)	176

Behaviour at sea

Additional data

Transportation data

Cargo group	34
State	liquide
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7

Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

PHTALATE DE DIISOBUTYLE

CAS Number: 84-69-5

> **Also known as:** 1,2-BENZENE DICARBOXYLIC ACID, DI(-2-METHYLPROPYL)ESTER, DIISOBUTYL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	84-69-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1047 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	278.35
Density of gas (kg/m3)	12.37
Boiling Point (°C)	298
Melting Point (°C)	-64
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	432
Flash Point (°C)	196
Lower explosivity limit (LEL) (volume %)	0.4

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'ester

Transportation data

Cargo group	34
State	liquide
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

Phtalate De Diisononyle

CAS Number: 28553-12-0

> **Also known as:** 1,2-Benzenedicarboxylic Acid, 1,2-Diisononyl Ester, Diisononyl Phthalate, Phtalate De Diisononyle

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	28553-12-0
Formula	$C_{26}H_{42}O_4$

Physical chemical data

Physical State (25°C)	Liquid
Kinematic viscosity (cSt)	82.47 [cSt] at a temperature of 20°C
Molar mass (g/mol)	418.609
Solubility (g/L)	0.2 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	432
Melting Point (°C)	-42
Flash Point (Pensky-Martens closed cup) (°C)	221
Henry's constant (mol/(m³·Pa))	0.15

Behaviour at sea

Log kow	9.37
Log koc	5.52
Biodegradation in estuary environment (Half-life) (days)	1242
Bioconcentration factor (BCF)	230

Additional data

MARPOL pollution category	Category	Description
	Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	0.42
Highest no observed effect concentration (NOEC) on algae (mg/l)	1.8

Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.004
Highest no observed effect concentration (NOEC) on fishes (mg/l)	75

PHTALATE DE DIMETHYLE

CAS Number: 131-11-3

Also known as: DIMETHYL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	131-11-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1190 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	194.2
Density of gas (kg/m3)	8.63
Boiling Point (°C)	284
Melting Point (°C)	5.5
Vapour Pressure (Pa)	800 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	491
Flash Point (°C)	146
Lower explosivity limit (LEL) (volume %)	0.9

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	inodore
Standard behavior classification	SD

Transportation data

Cargo group	34
Family name	esters

Reactivity data

Water	Non

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

IDHL	248
TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	75
TEEL-3 (mg/m3)	500

Ecotoxicity

PHTALATE DE DINONYLE

CAS Number: 84-76-4

> **Also known as:** DINONYL PHTHALATE, DINONYL 1,2-BENZENEDICARBOXYLATE, DI-n-NONYL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	84-76-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	970 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	418.68
Density of gas (kg/m3)	18.62
Boiling Point (°C)	413
Flash Point (°C)	216

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Cargo group	34
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

PHTALATE DE DITRIDECYLE

CAS Number: 119-06-2

Also known as: DITRIDECYL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	119-06-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	951 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	530.8
Density of gas (kg/m3)	23.61
Boiling Point (°C)	> 315.6
Melting Point (°C)	< -37
Flash Point (°C)	254

Behaviour at sea

Additional data

Colour	incolore
Odour	presque inodore

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

PHTHALATE D'ETHYLE

CAS Number: 84-66-2

> **Also known as:** ANOZOL (T), 1,2-BENZENE DICARBOXYLIC ACID, DIETHYL-ESTER, DEP (T), DIETHYL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	84-66-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1120 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	222
Density of gas (kg/m3)	9.88
Boiling Point (°C)	298
Melting Point (°C)	-44
Ignition Temperature (°C)	457
Flash Point (°C)	117
Lower explosivity limit (LEL) (volume %)	0.75

Behaviour at sea

Additional data

Colour	blanc
Odour	douce odeur chimique

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Non

Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TLV-TWA	0.5
TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	100
TEEL-3 (mg/m3)	500

Ecotoxicity

PHTHALATE DE BUTYLE ET DE BENZYLE

UN Number: 3082 - CAS Number: 85-68-7

Also known as: BBP, BENZYL normal-BUTYL PHTHALATE, BENZYL N-BUTYL PHTHALATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	85-68-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1120 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	313
Boiling Point (°C)	370
Vapour Pressure (Pa)	21 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur légère

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000

Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

PHTHALATE DE DIISODECYLE

CAS Number: 26761-40-0

> **Also known as:** 1,2-BENZENE DICARBOXYLIC ACID DILSODECYLESTER, BIS (ISO-DECYL) PHTHALATE, BIS (8-METHYL NONYL) ESTER, DI ALKYL (C7-C13) PHTHALATE, DIISODECYL PHTHALATE, DISODECYL ESTER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	26761-40-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	967 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	446.7
Melting Point (°C)	-50
Ignition Temperature (°C)	402
Flash Point (°C)	229
Lower explosivity limit (LEL) (volume %)	0.3
Upper explosivity limit (UEL) (volume %)	264

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur légère

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

PHTHALATE DE DIOCTYLE

CAS Number: 117-84-0

> **Also known as:** o-BENZENE DICARBOXYLIC ACID DIOCTYL ESTER, 1,2-BENZENE DICARBOXYLIC ACID DIOCTYL ESTER, CELLUFLEX DOP, DEHP, DIETHYL HEXYL PHTHALATE, DI-(2-ETHYL-HEXYL) PHTHALATE, DINOPOL NOP, DIOCTYL-o-BENZENE DICARBOXYLATE, DIOCTYL PHTHALATE, DNOP, DOP, Bis(2-Ethylhexyl) Phthalate, Bis(2-Ethylhexyl)Phthalate, Diethylhexyl Phthalate, Bis(2-Ethylhexyl) 1,2-Benzenedicarboxylate, Di(2-Ethylhexyl)Phthalate, Di(2-Ethylhexyl) Orthophthalate, 1,2-Benzenedicarboxylic Acid, Bis(2-Ethylhexyl) Ester, Phthalic Acid, Bis(2-Ethylhexyl) Ester, Di-Sec-Octyl Phthalate

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	117-84-0
Formula	$C_{24}H_{38}O_4$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	980 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	82.4 [cSt] at a temperature of 20°C 59 [cSt] at a temperature of 25°C
Molar mass (g/mol)	390.6
Solubility (g/L)	0 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	386
Melting Point (°C)	412
Critical temperature (°C)	835
Critical pressure (Pa)	1070000
Ignition Temperature (°C)	390
Flash Point (°C)	199
Flash Point (Pensky-Martens closed cup) (°C)	200
Flash Point (Cleveland open cup) (°C)	218
Lower explosivity limit (LEL) (volume %)	0.17
Combus enthalpy (J/Kg)	28200000
Specific heat capacity (J/(Kg·K))	1804
Combustion efficiency (%)	70
Mass flow rate of the combustion surface (Kg/(m²·s))	0.03

Rad fraction (%)	30
Henry's constant (mol/(m³·Pa))	4.43

Behaviour at sea

Log kow	7.5
Log koc	6
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	2500

Additional data

Colour	incolore
Odour	odeur légère

MARPOL pollution category

Category	Description
X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight

Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Health**	
	H360	May damage fertility or the unborn child.
Precautionary statements	**Prevention**	
	P201	Obtain special instructions before use.
	P281	Use personal protective equipment as required.
	Response	
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
TLV-TWA	0.3	
TEEL-1 (mg/m3)	10	
TEEL-2 (mg/m3)	75	
TEEL-3 (mg/m3)	500	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.511
Lowest median lethal concentration (LC50) on fishes (mg/l)	0.69
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1
Highest no observed effect concentration (NOEC) on fishes (mg/l)	5

Poly (4+) Ethoxylate De Nonylphenol

CAS Number: 9016-45-9

> **Also known as:** Nonylphenoxypoly(Ethyleneoxy)Ethanol, Alpha-(Nonylphenyl)-Omega-Hydroxypoly(Oxy-1,2-Ethanediyl, Nonylphenol Poly (4+)Ethoxylate, Poly (4+) Ethoxylate De Nonylphenol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	9016-45-9
Formula	C_9H_{19}-$C_6H_4O(CH_2CH_2O)nH$

Physical chemical data

Physical State (25°C)	Liquid

Behaviour at sea

Bioconcentration factor (BCF)	10

Additional data

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Reactivity data

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

Hazard statements	**Health**	
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	Environmental	
	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P264	Wash ... thoroughly after handling.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P321	Specific treatment (see ... on this label).
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P362	Take off contaminated clothing and wash before reuse.
	P391	Collect spillage.

Ecotoxicity

POLY(4-12)ETHOXYLATES DE NONYLPHENOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide/Solide
Density (kg/m3)	1070 [Kg/m³] at a temperature of 20°C
Melting Point (°C)	-0.714285714
Flash Point (°C)	> 205

Behaviour at sea

Additional data

Colour	incolore
Odour	légère
Standard behavior classification	D/DE

Transportation data

Reactivity data

Metal(s) and alloys	Oui (Al, Cu, Zn, Brass)

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	1 - Low
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating

Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

POLYBUTENE

CAS Number: 9003-29-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	9003-29-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	960 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	225
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Flash Point (°C)	215

Behaviour at sea

Additional data

Standard behavior classification	E, FE, F

Transportation data

Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

POLYETHOXYLATE DE TRIMETHYLOL PROPANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Flash Point (°C)	183

Behaviour at sea

Additional data

Transportation data

Reactivity data

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible

Human toxicity threshold

Ecotoxicity

POLYPHOSPHATE D'AMMONIUM en solution

Also known as: AMMONIUM POLYPHOSPHATE solution

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1400 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	106
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	vert
Odour	inodore

Transportation data

Cargo group	43
State	liquide
Family name	sol. aqueuses diverses

Reactivity data

Acid(s)	Oui
Metal(s) and alloys	Oui (Cu, Zn)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

Ecotoxicity

POLYPROPYLENE GLYCOL

CAS Number: 25322-69-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	25322-69-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1012 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	200
Flash Point (°C)	390

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore, odeur douce

Transportation data

Cargo group	30
State	liquide
Temperature (°C)	< 60°
Pressure (Pa)	ambiante
Family name	oléfines

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	30
TEEL-2 (mg/m3)	200
TEEL-3 (mg/m3)	500

Ecotoxicity

POUDRE NOIRE

Also known as: BLACK POWDER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide

Behaviour at sea

Additional data

Transportation data

State	solide
IMO class	1.1 D

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

PROPANE

UN Number: 1978 - CAS Number: 74-98-6

Also known as: Dimethylmethane, Propyl Hydride, Propane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1978
CAS number	74-98-6
Formula	C_3H_8

Physical chemical data

Physical State (20°C)	Gaz
Physical State (25°C)	Gas
Density (kg/m3)	2.012 [Kg/m³] at a temperature of 20°C 493 [Kg/m³] at a temperature of 25°C
Molar mass (g/mol)	44.09
Density of gas (kg/m3)	2.012
Solubility (g/L)	70 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	-41.9
Melting Point (°C)	-186
Critical temperature (°C)	369.89
Critical pressure (Pa)	4215000
Surface tension (mN/m)	16 [mN/m] at a temperature of -47°C
Interfacial tension (mN/m)	50 [mN/m] at a temperature of -50°C and salinity of 0‰
Vapour Pressure (Pa)	861050 [Pa] at a temperature of 20°C 953260 [Pa] at a temperature of 25°C
Vapour pressure at 70% of critical temperature (Pa)	299030
Ignition Temperature (°C)	470
Flash Point (°C)	-42
Flash Point (Pensky-Martens closed cup) (°C)	-104
Lower explosivity limit (LEL) (volume %)	2.2
Upper explosivity limit (UEL) (volume %)	9.5
Vapor enthalpy (J/Kg)	3353741 [J/Kg] at a temperature of 25°C
Henry's constant (mol/(m³·Pa))	71636.775

Behaviour at sea

Log kow	2.36
Log koc	1.33
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	13

Additional data

Colour	incolore
Odour	inodore

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	31
State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	paraffines
IMO class	2(2.1)

Reactivity data

Water	Non
Static electricity	Oui

GESAMP Hazard profile

Interference with coastal amenities (E2)	G - Gas

Human toxicity threshold

IDHL	20000	
Hazard statements	**Physical**	
	H220	Extremely flammable gas.
TLV-TWA	1000	
TEEL-1 (mg/m3)	5500 ppm	
TEEL-2 (mg/m3)	17000 ppm	
TEEL-3 (mg/m3)	33000 ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	69.43
Lowest median lethal concentration (LC50) on fishes (mg/l)	49.9

PROPANOL

UN Number: 1274 - CAS Number: 71-23-8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1274
CAS number	71-23-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	803 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	60.1
Density of gas (kg/m3)	3.48
Boiling Point (°C)	97.4
Melting Point (°C)	-126
Vapour Pressure (Pa)	1933 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	405
Flash Point (°C)	15
Upper explosivity limit (UEL) (volume %)	13.5

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'alcool

Transportation data

Package group	II
Cargo group	20
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alcools, glycols
IMO class	3.2/3.3

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	R - Reprotoxicity
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	4000
TLV-TWA	200
TEEL-1 (mg/m3)	250 ppm
TEEL-2 (mg/m3)	250 ppm
TEEL-3 (mg/m3)	800 ppm

Ecotoxicity

PROPIONATE D'ETHYLE

UN Number: 1195 - CAS Number: 105-37-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1195
CAS number	105-37-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	890 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	102.1
Density of gas (kg/m3)	4.515
Boiling Point (°C)	99
Melting Point (°C)	-74
Vapour Pressure (Pa)	< 5300 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	440
Flash Point (°C)	12
Lower explosivity limit (LEL) (volume %)	1.9
Upper explosivity limit (UEL) (volume %)	11

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'ananas

Transportation data

Package group	II
Cargo group	34
State	liquide
Temperature (°C)	ambiante
Family name	esters
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	25 ppm
TEEL-2 (mg/m3)	150 ppm
TEEL-3 (mg/m3)	750 ppm

Ecotoxicity

PROPIONATE DE n-BUTYLE

UN Number: 1914

Also known as: n-BUTYL PROPIONATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1914

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	840 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	130.2
Density of gas (kg/m3)	5.805
Boiling Point (°C)	145
Melting Point (°C)	-90
Vapour Pressure (Pa)	424 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	425
Flash Point (°C)	32
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	6.8

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Temperature (°C)	ambiante

Family name	esters
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	500
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

PROPIONITRILE

UN Number: 2404

Also known as: CYANOETHANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2404

Physical chemical data

Physical State (20°C)	Liquide
Molar mass (g/mol)	55.08
Density of gas (kg/m3)	2.45
Boiling Point (°C)	97.3
Melting Point (°C)	-92.8
Vapour Pressure (Pa)	5200 [Pa] at a temperature of 20°C
Lower explosivity limit (LEL) (volume %)	3.1

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'ether

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	37
State	liquide
Family name	nitriles
IMO class	3.2

Reactivity data

Water	Non

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Specific Health Concern (D3)	R - Reprotoxicity
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	6 ppm
TEEL-2 (mg/m3)	7 ppm
TEEL-3 (mg/m3)	37 ppm

Ecotoxicity

PROPYLENE

UN Number: 1077

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1077

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.935 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	42.08
Density of gas (kg/m3)	1.935
Boiling Point (°C)	-47.5
Melting Point (°C)	-185
Vapour Pressure (Pa)	1053520 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	455
Flash Point (°C)	-48
Upper explosivity limit (UEL) (volume %)	11

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Gaz,Colis
Ship type	2G,2PG
Cargo group	30
State	gas liquéfié
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	oléfines
IMO class	2(2.1)

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	1500 ppm
TEEL-2 (mg/m3)	10000 ppm
TEEL-3 (mg/m3)	20000 ppm

Ecotoxicity

PROPYLENE trimère

UN Number: 2057 - CAS Number: 13987-01-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2057
CAS number	13987-01-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	738 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	126.24
Density of gas (kg/m3)	5.61
Boiling Point (°C)	133/142
Flash Point (°C)	24

Behaviour at sea

Additional data

Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Transport mode	Vrac,Colis
Package group	II/III
Cargo group	30
Temperature (°C)	ambiante
Family name	oléfines
IMO class	3.2/3.3

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

PROPYLENE-BUTYLENE copolymère

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Boiling Point (°C)	very high

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Cargo group	30
Family name	oléfines

Reactivity data

Water	Non

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

PROPYLENEGLYCOL

CAS Number: 57-55-6

> **Also known as:** 1,2-DIHYDROXYPROPANE, 2-Hydroxypropanol, 1,2-Propanediol, Alpha-Propylene Glycol, Monopropylene Glycol, Methylethylene Glycol, Methyl Glycol, Propylene Glycol, Pg 12, Propane-1,2-Diol, Propanediol, Methylethyl Glycol, 1,2-Propylene Glycol, α-Propylene Glycol

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	57-55-6
Formula	$C_3H_8O_2$

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1040 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	54.05 [cSt] at a temperature of 20°C 39 [cSt] at a temperature of 25°C
Molar mass (g/mol)	76.09
Density of gas (kg/m3)	3.39
Solubility (g/L)	1040000 [g/L] at a temperature of 20°C and salinity of 0‰ 1040000 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	187
Melting Point (°C)	-59
Critical temperature (°C)	676.4
Critical pressure (Pa)	5941000
Surface tension (mN/m)	38 [mN/m] at a temperature of 20°C 36.51 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	10.4 [Pa] at a temperature of 20°C 17 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	420
Flash Point (°C)	99
Flash Point (Pensky-Martens closed cup) (°C)	99
Flash Point (Cleveland open cup) (°C)	107.2
Lower explosivity limit (LEL) (volume %)	2.5

Upper explosivity limit (UEL) (volume %)	12.6
Vapor enthalpy (J/Kg)	688000 [J/Kg] at a temperature of 187.6°C 486366 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	21700000
Specific heat capacity (J/(Kg·K))	2507.55
Combustion efficiency (%)	99
Mass flow rate of the combustion surface (Kg/(m²·s))	0.02
Rad fraction (%)	28
Henry's constant (mol/(m³·Pa))	0.01

Behaviour at sea

Log kow	-0.92
Log koc	0.65
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	10
Bioconcentration factor (BCF)	1

Additional data

Colour	incolore
Odour	inodore

MARPOL pollution category

Category	Description
Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non
Abilities	Miscible in water..
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui (light metals)
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TLV-TWA	25
TEEL-1 (mg/m3)	10
TEEL-2 (mg/m3)	10
TEEL-3 (mg/m3)	500

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	19000
Lowest median lethal concentration (LC50) on crustacean (mg/l)	18340
Lowest median lethal concentration (LC50) on fishes (mg/l)	46500
Highest no observed effect concentration (NOEC) on algae (mg/l)	> 5300
Assessment factor (AF)	1000 on the short term 10000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	18340 [µg/l] on the short term 1834 [µg/l] on the long term

PROTEINES VEGETALES solution (hydrolisées)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	> 1000 [Kg/m³] at a temperature of 20°C
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à jaunâtre

Transportation data

Cargo group	43

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating

Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

Ecotoxicity

PYRIDINE

UN Number: 1282 - CAS Number: 110-86-1

Also known as: AZABENZENE, AZINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1282
CAS number	110-86-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	983 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	79.1
Density of gas (kg/m3)	3.483
Boiling Point (°C)	115.1
Melting Point (°C)	-42
Vapour Pressure (Pa)	1500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	550
Flash Point (°C)	17
Lower explosivity limit (LEL) (volume %)	1.8
Upper explosivity limit (UEL) (volume %)	12.4

Behaviour at sea

Additional data

Colour	incolore à jaune
Odour	forte odeur nauséabande

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante

Pressure (Pa)	pressurisé
Family name	amines aromatiques
IMO class	3.2

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	3600
TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	200 ppm
TEEL-3 (mg/m3)	1000 ppm

Ecotoxicity

PYROPHOSPHATE DE TETRAETHYLE

Also known as: BLADAN

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1180 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	290.2
Vapour Pressure (Pa)	10100 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à jaune
Odour	odeur douce
Standard behavior classification	DE, D, SD

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.15

Ecotoxicity

SALICYLATE DE METHYLE

UN Number: 3082 - CAS Number: 119-36-8

Also known as: o-ASINIC ACID, BENZOIC ACID, 2-METHOXY, BETULA OR GAULTHERIA OIL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	119-36-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1174 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	152.15
Density of gas (kg/m3)	6.77
Boiling Point (°C)	222
Melting Point (°C)	-8.6
Vapour Pressure (Pa)	6000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	453
Flash Point (°C)	96

Behaviour at sea

Additional data

Colour	incolore, jaunâtre ou rougeâtr
Odour	inodore

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	34
State	liquide
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	R - Reprotoxicity
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

SILICATE DE SODIUM

CAS Number: 1344-09-8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	1344-09-8

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	122.1
Melting Point (°C)	1088

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	SD

Transportation data

State	visc. liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight

Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	25
TEEL-2 (mg/m3)	150
TEEL-3 (mg/m3)	500

Ecotoxicity

SODIUM métal

UN Number: 1428

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1428

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	971 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	22.49
Boiling Point (°C)	883
Melting Point (°C)	97.8
Ignition Temperature (°C)	121

Behaviour at sea

Additional data

Colour	argenté à blanc grisâtre
Odour	odeur légère
Standard behavior classification	D, FD

Transportation data

State	liquide, solide
Temperature (°C)	110° - 121°,ambiante
Pressure (Pa)	pressurisé
IMO class	4.3

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non

Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	0.5
TEEL-3 (mg/m3)	50

Ecotoxicity

Solutions D'Hexamethylene Tetramine

UN Number: 1328 - CAS Number: 100-97-0

Also known as: Hexamethylenetetramine Solutions, Solutions D'Hexamethylene Tetramine

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1328
CAS number	100-97-0
Formula	$C_6H_{12}N_4$

Physical chemical data

Physical State (25°C)	Liquid
Molar mass (g/mol)	140.186
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰

Behaviour at sea

Log kow	-2.13

Additional data

MARPOL pollution category

Category	Description
Other Substances	Substances which have been evaluated and found to fall outside Category X, Y or Z because they are considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing these substances are not subject to any requirements of MARPOL Annex II.

Transportation data

Reactivity data

Abilities	Solution.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Hazard statements	**Physical**	
	H228	Flammable solid.
	Health	
	H317	May cause an allergic skin reaction.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.

Ecotoxicity

SOLVANTS NAPHTES DU GOUDRON DE HOUILLE

UN Number: 2553 - CAS Number: 8030-30-6

Also known as: COAL TAR NAPHTA SOLVENT

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2553
CAS number	8030-30-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	870 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	107.3
Density of gas (kg/m3)	4.79
Boiling Point (°C)	125/200
Melting Point (°C)	< 15
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	277
Flash Point (°C)	15
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	6.1

Behaviour at sea

Additional data

Colour	incolore à jaune clair
Odour	odeur d'essence
Standard behavior classification	FE

Transportation data

Transport mode	Vrac,Colis

Package group	II
Cargo group	33
State	liquide
Family name	mélange d'hydrocarbures
IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	10000

Ecotoxicity

SORBITOL en solution

CAS Number: 50-70-4

Also known as: CHOLAXINE, DI AKARMON

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	50-70-4

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1490 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	182.17
Density of gas (kg/m3)	4.128
Melting Point (°C)	100
Flash Point (°C)	918

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'oeufs pourris
Standard behavior classification	D, SD, S

Transportation data

Cargo group	20
State	liquide
Temperature (°C)	élevée
Pressure (Pa)	ambiante
Family name	alcools, glycols

Reactivity data

Acid(s)	Oui
Base(s)	Oui

Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

TEEL-1 (mg/m3)	125
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

SOUFRE fondu

UN Number: 2448 - CAS Number: 7704-34-9

Also known as: Sulphur (Commercially Formed, Solid), Souffre (Solide), Sulphur (Molten), Souffre (Fondu)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2448
CAS number	7704-34-9
Formula	S

Physical chemical data

Physical State (20°C)	Solide
Physical State (25°C)	Liquid
Density (kg/m3)	1800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	256.51
Density of gas (kg/m3)	11.48
Solubility (g/L)	0 [g/L] at a temperature of 20°C and salinity of 0‰ 0 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	444.8
Melting Point (°C)	113
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C 5e-07 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	260
Flash Point (°C)	168
Lower explosivity limit (LEL) (volume %)	0.3
Upper explosivity limit (UEL) (volume %)	12.1

Behaviour at sea

Additional data

Colour	jaune, orange, brun, gris
Odour	odeur douce et agréable

MARPOL pollution category	Category	Description
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	132°
Pressure (Pa)	pressurisé
IMO class	4.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Hazard statements	Health	
	H315	Causes skin irritation.
TEEL-1 (mg/m3)	0.4	
TEEL-2 (mg/m3)	2.5	
TEEL-3 (mg/m3)	12.5	

Ecotoxicity

STEARATE DE BUTYLE

Also known as: BUTYLOCTADECANOATE, BUTYL STEARATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	861 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	340
Boiling Point (°C)	220/225
Melting Point (°C)	17/22
Flash Point (°C)	160

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur grasse nauséabonde

Transportation data

State	liquide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

STYRENE monomère

UN Number: 2055 - CAS Number: 100-42-5

> **Also known as:** CINNAMENE, CINNAMENOL, DIAREX HF 77, Ethenylbenzene, Phenylethene, Phenethylene, Phenylethylene, Styrene Monomer, Styrol, Styrolene, Vinylbenzene, Vinylbenzol, Vinyl Benzene, Styrene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2055
CAS number	100-42-5
Formula	C_8H_8

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	906 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.83 [cSt] at a temperature of 20°C 0.75 [cSt] at a temperature of 25°C
Molar mass (g/mol)	104.15
Density of gas (kg/m3)	4.631
Solubility (g/L)	300 [g/L] at a temperature of 20°C and salinity of 0‰ 310 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	145.4
Melting Point (°C)	-31
Surface tension (mN/m)	32.14 [mN/m] at a temperature of 20°C
Interfacial tension (mN/m)	35.48 [mN/m] at a temperature of 20°C and salinity of 0‰
Vapour Pressure (Pa)	600 [Pa] at a temperature of 20°C 810 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	490
Flash Point (°C)	32
Flash Point (Pensky-Martens closed cup) (°C)	31
Flash Point (Cleveland open cup) (°C)	34.4
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	6.1
Vapor enthalpy (J/Kg)	371579 [J/Kg] at a temperature of 145.2°C

Combus enthalpy (J/Kg)	40500000
Specific heat capacity (J/(Kg·K))	1747.5
Combustion efficiency (%)	70
Mass flow rate of the combustion surface (Kg/(m²·s))	0.07
Rad fraction (%)	60
Henry's constant (mol/(m³·Pa))	278

Behaviour at sea

Log kow	3.02
Log koc	2.96
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	74

Additional data

Colour	incolore à jaune pâle	
Odour	inodore	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FE	

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non

Metal(s) and alloys	Non
Static electricity	Oui
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui
Notable risks	Polymerization.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	5000	
Hazard statements	**Health**	
	H317	May cause an allergic skin reaction.
	Environmental	
	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements	**Prevention**	
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P321	Specific treatment (see ... on this label).
	P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
	P363	Wash contaminated clothing before reuse.
	P391	Collect spillage.
	Disposal	
	P501	Dispose of contents/container to ...

TLV-TWA	50
ERPG-1 (ppm)	50
ERPG-2 (ppm)	250
ERPG-3 (ppm)	1000

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	4.9
Lowest median lethal concentration (LC50) on crustacean (mg/l)	4.7
Lowest median lethal concentration (LC50) on fishes (mg/l)	4.02
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1.01
Assessment factor (AF)	100 on the short term 1000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	40.2 [µg/l] on the short term 4.02 [µg/l] on the long term

SUCCINATE DE DIMETHYLE

CAS Number: 106-65-0

Also known as: DIMETHYL SUCCINATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	106-65-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1117 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	146.14
Density of gas (kg/m3)	6.5
Boiling Point (°C)	200
Melting Point (°C)	18/19
Vapour Pressure (Pa)	41 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	365
Flash Point (°C)	85
Upper explosivity limit (UEL) (volume %)	8.5

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	S/SD/D

Transportation data

Cargo group	34
Temperature (°C)	ambiante
Family name	esters

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	75 ppm
TEEL-3 (mg/m3)	350 ppm

Ecotoxicity

SUIF

CAS Number: 61789-97-7

Also known as: Tallow, Suif

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	61789-97-7

Physical chemical data

Physical State (20°C)	Solide
Physical State (25°C)	Solid
Density (kg/m3)	870 [Kg/m³] at a temperature of 20°C
Solubility (g/L)	0 [g/L] at a temperature of 20°C and salinity of 0‰ 0 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	829
Melting Point (°C)	31
Vapour Pressure (Pa)	266 [Pa] at a temperature of 20°C
Flash Point (Pensky-Martens closed cup) (°C)	265
Henry's constant (mol/(m³·Pa))	1.49

Behaviour at sea

Persistence (days)	1.9
Log kow	23.3
Log koc	10
Biodegradation in estuary environment (Half-life) (days)	552

Additional data

Colour	jaune foncé

MARPOL pollution category	Category	Description
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Cargo group	34
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	esters

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	ED - Evaporator/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

SUIF A SAVON (solution disproportionée)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1040 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	100
Vapour Pressure (Pa)	2400 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Transportation data

Reactivity data

GESAMP Hazard profile

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

SULFATE D'ALUMINIUM solutions

> **Also known as:** ALUMINIUM SULFATE solution, ALUMINIUM TRISULPHATE Solution, DIALUMINIUM SULPHATE Solution

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1270 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	342.1
Boiling Point (°C)	101
Melting Point (°C)	-15.6

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

Cargo group	43
State	liquide
Temperature (°C)	ambiante
Family name	sol. aqueuses diverses

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui (carbon steel)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

SULFATE D'URANYLE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Molar mass (g/mol)	420.2

Behaviour at sea

Additional data

Colour	jaune
Odour	inodore

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	2 (as U)
TLV-TWA	0.02 (U)

Ecotoxicity

SULFATE DE DIETHYLE

UN Number: 1594 - CAS Number: 64-67-5

Also known as: DIETHYL SULPHATE, DIETHYL SULPHATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1594
CAS number	64-67-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	154.2
Density of gas (kg/m3)	6.84
Boiling Point (°C)	208
Melting Point (°C)	-25
Vapour Pressure (Pa)	130 (47�C) [Pa] at a temperature of 20°C
Ignition Temperature (°C)	436
Flash Point (°C)	104
Lower explosivity limit (LEL) (volume %)	4.1

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de menthe poivrée
Standard behavior classification	SD

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	34
State	liquide

Temperature (°C)	ambiante
Family name	esters
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Combustibles	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	0.2 ppm
TEEL-2 (mg/m3)	1.5 ppm
TEEL-3 (mg/m3)	25 ppm

Ecotoxicity

SULFATE DE SODIUM en solution

CAS Number: 7757-82-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	7757-82-6

Physical chemical data

Physical State (20°C)	Liquide
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Transportation data

Cargo group	43
State	liquide

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver

Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

SULFITE DE SODIUM

CAS Number: 7757-83-7

Also known as: DISODIUM SULPHITE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	7757-83-7

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2600 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	126.04
Melting Point (°C)	>500

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore
Standard behavior classification	SD

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	30
TEEL-2 (mg/m3)	50
TEEL-3 (mg/m3)	100

Ecotoxicity

SULFONATE DE SODIUM (de pétrole)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1050 [Kg/m³] at a temperature of 20°C
Melting Point (°C)	-5
Vapour Pressure (Pa)	< 100 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

SULFURE D'AMMONIUM en solution (< 45%)

UN Number: 2683 - CAS Number: 12124-99-1

> **Also known as:** AMMONIUM HYDROGEN SULPHIDE SOLUTION, AMMONIUM MONOSULFIDE, AMMONIUM SULFHYDRATE, AMMONIUM SULPHIDE solution (45% or less), DIAMMONIUM SULPHIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2683
CAS number	12124-99-1

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	990/1010 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	68.14
Boiling Point (°C)	38/100
Melting Point (°C)	-18
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C
Flash Point (°C)	22
Upper explosivity limit (UEL) (volume %)	46

Behaviour at sea

Additional data

Colour	verdâtre à jaune
Odour	odeur ammoniacale

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Cu, Zn)

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	10 ppm
TEEL-2 (mg/m3)	15 ppm
TEEL-3 (mg/m3)	15 ppm

Ecotoxicity

SULFURE D'HYDROGENE

UN Number: 1053

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1053

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	1.548 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	34.08
Density of gas (kg/m3)	1.548
Boiling Point (°C)	-60.4
Melting Point (°C)	-86
Vapour Pressure (Pa)	1924700 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	260
Lower explosivity limit (LEL) (volume %)	4.3
Upper explosivity limit (UEL) (volume %)	45

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'oeufs pourris
Standard behavior classification	GD, G

Transportation data

State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	2(2.3)

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	300
TLV-TWA	10
ERPG-1 (ppm)	0.1
ERPG-2 (ppm)	30
ERPG-3 (ppm)	100

Ecotoxicity

SULFURE DE CALCIUM ALKYLPHENOL mélange de phosphorosulfure de polyoléfine

Also known as: CALCIUM ALKYL PHENOL SULPHIDE polyolefin phosphorosulphide mixture (LOA)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide/Solide
Density (kg/m3)	945 [Kg/m³] at a temperature of 20°C
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Flash Point (°C)	177

Behaviour at sea

Additional data

Standard behavior classification	FED

Transportation data

Reactivity data

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible

Human toxicity threshold

Ecotoxicity

SULFURE DE SODIUM (avec moins de 30% d'eau de cristallisation)

UN Number: 1385 - CAS Number: 1313-82-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1385
CAS number	1313-82-2

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2470 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	78.4

Behaviour at sea

Additional data

Colour	jaune à rouge
Odour	inodore

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	4.2

Reactivity data

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	2.5
TEEL-2 (mg/m3)	15
TEEL-3 (mg/m3)	75

Ecotoxicity

SULPHATE D'AMMONIUM solution

CAS Number: 7783-20-2

Also known as: AMMONIUM SULPHATE solution, DIAMMONIUM SULPHATE, DOLAMIN (TR)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	7783-20-2

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1200 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	132.14
Boiling Point (°C)	105

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

State	solide

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible

Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

Ecotoxicity

SULPHOLANE

CAS Number: 126-33-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	126-33-0

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	> 1260 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	120.17
Boiling Point (°C)	285
Melting Point (°C)	26
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Flash Point (°C)	166

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'huile

Transportation data

Cargo group	39
Temperature (°C)	ambiante
Family name	sulpholane

Reactivity data

Water	Non
Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10

Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

TARTRATE D'ANTIMOINE ET DE POTASSIUM

UN Number: 1551

Also known as: ANTIMONY POTASSIUM TARTRATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1551

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2600 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	334

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

Package group	III
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

IDHL	16 (as Sb)
TLV-TWA	0.1 (Sb)
TEEL-1 (mg/m3)	3.92
TEEL-2 (mg/m3)	6.53
TEEL-3 (mg/m3)	131

Ecotoxicity

TEREBENTHINE (Essence de)

UN Number: 1299

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1299

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	860 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	136
Density of gas (kg/m3)	6.063
Boiling Point (°C)	155.3
Melting Point (°C)	-55
Vapour Pressure (Pa)	500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	220
Flash Point (°C)	33
Lower explosivity limit (LEL) (volume %)	0.8

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore
Standard behavior classification	FE

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines

IMO class	3.3

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

IDHL	1500
TLV-TWA	100
TEEL-1 (mg/m3)	20 ppm
TEEL-2 (mg/m3)	20 ppm
TEEL-3 (mg/m3)	800 ppm

Ecotoxicity

TEREBENTHINE (succédané d'essence de)

UN Number: 1300

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1300

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	780 [Kg/m³] at a temperature of 20°C
Density of gas (kg/m3)	5.35
Boiling Point (°C)	155
Vapour Pressure (Pa)	5865 [Pa] at a temperature of 20°C
Flash Point (°C)	42
Lower explosivity limit (LEL) (volume %)	0.8

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur desagréable, pénétrante

Transportation data

Transport mode	Vrac,Colis
Package group	II/III
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	mélange d'hydrocarbures
IMO class	3.2/3.3

Reactivity data

Acid(s)	Oui

Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	60 ppm
TEEL-2 (mg/m3)	400 ppm
TEEL-3 (mg/m3)	2000 ppm

Ecotoxicity

Tertioamymethylether

CAS Number: 994-05-8

> **Also known as:** 2-Methoxy-2-Methyl-Butane, Methyl-Tert-Pentyl Ether, 1,1-Dimethylpropyl Methyl Ether, Tame, Tert-Amyl Methyl Ether, Tertioamymethylether

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	994-05-8
Formula	$C_6H_{14}O$

Physical chemical data

Physical State (25°C)	Liquid
Molar mass (g/mol)	102.174
Solubility (g/L)	2640 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	86.1
Melting Point (°C)	-80
Critical molar volume (m³/mol)	0.000374
Critical temperature (°C)	535
Critical pressure (Pa)	3200000
Flash Point (Pensky-Martens closed cup) (°C)	-7
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	7.4
Specific heat capacity (J/(Kg·K))	2949
Henry's constant (mol/(m³·Pa))	133.7

Behaviour at sea

Log kow	1.92
Log koc	1.36
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	5

Additional data

MARPOL pollution category	Category	Description
	X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H336	May cause drowsiness or dizziness.

Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P271	Use only outdoors or in a well-ventilated area.
	Response	
	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	Storage	
	P403 + P235	Store in a well-ventilated place. Keep cool.

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	14
Lowest median lethal concentration (LC50) on fishes (mg/l)	580
Highest no observed effect concentration (NOEC) on algae (mg/l)	77
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	51
Highest no observed effect concentration (NOEC) on fishes (mg/l)	63.9
Assessment factor (AF)	50 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	68 [µg/l] on the long term

TETRACHLOROETHANE

UN Number: 1702 - CAS Number: 79-34-5

Also known as: ACETYLENE TETRACHLORIDE, BONOFORM, CELLON

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1702
CAS number	79-34-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1595 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	167.85
Density of gas (kg/m3)	7.482
Boiling Point (°C)	146.5
Melting Point (°C)	-44
Vapour Pressure (Pa)	12100 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	odeur légère

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	hydrocarbures halogènés
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	150
TEEL-2 (mg/m3)	30
TEEL-3 (mg/m3)	100

Ecotoxicity

TETRACHLORURE DE CARBONE

UN Number: 1846

Also known as: CARBON TET, CARBON TETRACHLORIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1846

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1590 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	153.83
Density of gas (kg/m3)	7.095
Boiling Point (°C)	76
Melting Point (°C)	-23
Vapour Pressure (Pa)	11997 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Biodegradation (A2)	NR - Not readily biodegradable

Human toxicity threshold

IDHL	300
ERPG-1 (ppm)	20
ERPG-2 (ppm)	100
ERPG-3 (ppm)	750

Ecotoxicity

TETRACHLORURE DE SILICIUM

UN Number: 1818

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1818

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1480 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	169.9
Density of gas (kg/m3)	7.611
Boiling Point (°C)	57.8
Melting Point (°C)	-68
Vapour Pressure (Pa)	25900 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore à jaune clair
Odour	odeur choquante
Standard behavior classification	DE, SD

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non

Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	15
TLV-TWA	0.03
ERPG-1 (ppm)	0.75
ERPG-3 (ppm)	37

Ecotoxicity

TETRACHLORURE DE TITANE

UN Number: 1838

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1838

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1726 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	189.71
Boiling Point (°C)	136
Melting Point (°C)	-24.1
Vapour Pressure (Pa)	1300 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore à jaune clair
Odour	inodore
Standard behavior classification	D, SD

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui

Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

ERPG-1 (ppm)	5 mg
ERPG-2 (ppm)	20 mg
ERPG-3 (ppm)	100 mg

Ecotoxicity

TETRAETHYLE DE PLOMB

UN Number: 1649 - CAS Number: 78-00-2

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1649
CAS number	78-00-2

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1633 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	322.44
Density of gas (kg/m3)	14.45
Boiling Point (°C)	180
Melting Point (°C)	-28
Vapour Pressure (Pa)	27 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	320
Flash Point (°C)	80
Lower explosivity limit (LEL) (volume %)	1.8

Behaviour at sea

Persistence (days)	3.1

Additional data

Marine pollutant	P

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Non

Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	5 - ≥ 4000
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	5 - Very highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	3 - Moderately high
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	4 - High
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	0.005
TEEL-1 (mg/m3)	0.468
TEEL-2 (mg/m3)	0.781
TEEL-3 (mg/m3)	62.4

Ecotoxicity

TETRAETHYLENEGLYCOL

CAS Number: 112-60-7

Also known as: BIS-k2-(2-HYDROXYETHOXY)ETHYL ETHER

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-60-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1120 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	194,23
Boiling Point (°C)	327
Melting Point (°C)	-6
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Flash Point (°C)	182

Behaviour at sea

Additional data

Colour	incolore à couleur paille
Odour	légère

Transportation data

Cargo group	40
State	liquide
Temperature (°C)	ambiante
Family name	glycol éthers

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	350
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

TETRAETHYLENEPENTAMINE

UN Number: 2320

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2320

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	998 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	189
Density of gas (kg/m3)	8.386
Boiling Point (°C)	340
Melting Point (°C)	-30
Ignition Temperature (°C)	321
Flash Point (°C)	163
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	4.6

Behaviour at sea

Additional data

Colour	jaune
Odour	légère odeur fruitée

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	15
TEEL-2 (mg/m3)	350
TEEL-3 (mg/m3)	500

Ecotoxicity

TETRAHYDROFURANE

UN Number: 2056 - CAS Number: 109-99-9

Also known as: Thf, Diethylneoxide, Tetramethyleneoxide, Tetrahydrofuran, Tetrahydrofurane

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2056
CAS number	109-99-9
Formula	C_4H_8O

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	888 [Kg/m³] at a temperature of 20°C 883.3 [Kg/m³] at a temperature of 25°C
Kinematic viscosity (cSt)	0.6 [cSt] at a temperature of 20°C
Molar mass (g/mol)	72.1
Density of gas (kg/m3)	3.225
Solubility (g/L)	10000000 [g/L] at a temperature of 20°C and salinity of 0‰
Boiling Point (°C)	66
Melting Point (°C)	-108
Critical molar volume (m³/mol)	0.000224
Critical temperature (°C)	540.5
Critical pressure (Pa)	5190000
Surface tension (mN/m)	26.4 [mN/m] at a temperature of 25°C
Vapour Pressure (Pa)	20260 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	260
Flash Point (°C)	-17
Flash Point (Pensky-Martens closed cup) (°C)	-14.5
Flash Point (Cleveland open cup) (°C)	-20
Lower explosivity limit (LEL) (volume %)	2
Upper explosivity limit (UEL) (volume %)	11.8
Vapor enthalpy (J/Kg)	413419 [J/Kg] at a temperature of 65°C 443452 [J/Kg] at a temperature of 25°C

Combus enthalpy (J/Kg)	34880000
Specific heat capacity (J/(Kg·K))	1720
Henry's constant (mol/(m³·Pa))	7.09

Behaviour at sea

Log kow	0.46
Log koc	1.03
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	3

Additional data

Colour	incolore	
Odour	odeur d'ammoniac	
MARPOL pollution category	**Category**	**Description**
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	DE	

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	41
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	éthers

Reactivity data

Water	Non
Abilities	Miscible in water.
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non
Notable risks	May form explosive peroxides.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	20000	
Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H302	Harmful if swallowed.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
	H351	Suspected of causing cancer.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P233	Keep container tightly closed.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P370 + P378	In case of fire: Use ... for extinction.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	200	
ERPG-1 (ppm)	100	
ERPG-2 (ppm)	500	
ERPG-3 (ppm)	5000	

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	5930
Lowest median lethal concentration (LC50) on fishes (mg/l)	2160
Highest no observed effect concentration (NOEC) on fishes (mg/l)	216
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	432 [µg/l] on the short term

TETRAHYDRONAPHTHALENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	974 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	132.21
Boiling Point (°C)	208
Melting Point (°C)	-35
Vapour Pressure (Pa)	133 [Pa] at a temperature of 20°C
Flash Point (°C)	284
Lower explosivity limit (LEL) (volume %)	0.8

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur fruitée

Transportation data

Cargo group	32
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	hydrocarbures aromatiques

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4

Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	0.6 ppm
TEEL-2 (mg/m3)	5 ppm
TEEL-3 (mg/m3)	20 ppm

Ecotoxicity

TETRAMERE DE PROPYLENE

UN Number: 2850

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2850

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	760 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	168.31
Density of gas (kg/m3)	7.482
Boiling Point (°C)	185
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C
Flash Point (°C)	42
Lower explosivity limit (LEL) (volume %)	0.6

Behaviour at sea

Additional data

Colour	incolore
Standard behavior classification	E, FE, F

Transportation data

Package group	III
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines
IMO class	3.3

Reactivity data

Acid(s)	Oui

Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

TETRAMETHYLE DE PLOMB

UN Number: 1649

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1649

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1999 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	267.33
Density of gas (kg/m3)	11.87
Boiling Point (°C)	110
Melting Point (°C)	-136
Vapour Pressure (Pa)	3332 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	320
Lower explosivity limit (LEL) (volume %)	1.8

Behaviour at sea

Persistence (days)	3.1

Additional data

Odour	térébenthine, odeur de moisi

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Non
Base(s)	Non

Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	3,5
TLV-TWA	0.007
TEEL-1 (mg/m3)	0.581
TEEL-3 (mg/m3)	51.6

Ecotoxicity

THIOCYANATE DE SODIUM en solution (< 56%)

CAS Number: 540-72-7

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	540-72-7

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	> 1000 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	81.08
Melting Point (°C)	< 0
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à jaune pâle
Odour	inodore

Transportation data

State	liquide
Temperature (°C)	ambiante

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate

Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	0.75
TEEL-3 (mg/m3)	100

Ecotoxicity

THIOSULFATE D'AMMONIUM en solution (< 60%)

CAS Number: 7783-18-8

> **Also known as:** AMMONIUM HYPO SOLUTIONS, AMMONIUM HYPOSULPHITE, AMMONIUM THIOSULPHATE solution (60% or less), DIAMMONIUM THIOSULPHATE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	7783-18-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1340 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	148.2
Density of gas (kg/m3)	< 1.29
Boiling Point (°C)	99/104
Melting Point (°C)	-0.7
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore à jaune-vert pâle
Odour	odeur ammoniacale

Transportation data

Cargo group	43
State	liquide
Temperature (°C)	ambiante
Family name	sol. aqueuses diverses

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

TOLUENE

UN Number: 1294 - CAS Number: 108-88-3

> **Also known as:** ANTISAL LA, BENZENE METHYL, Methylbenzene, Methylbenzol, Phenylmethane, Toluol, Toluene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1294
CAS number	108-88-3
Formula	C_7H_8

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	867 [Kg/m³] at a temperature of 20°C
	880.9 [Kg/m³] at a temperature of 5°C
	875.7 [Kg/m³] at a temperature of 10°C
	868.3 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	0.68 [cSt] at a temperature of 20°C
	0.64 [cSt] at a temperature of 25°C
	2.2477 [cSt] at a temperature of 5°C
	2.0669 [cSt] at a temperature of 10°C
	2.0845 [cSt] at a temperature of 20°C
Molar mass (g/mol)	92.14
Density of gas (kg/m3)	4.1
Solubility (g/L)	515 [g/L] at a temperature of 20°C and salinity of 0‰
	535 [g/L] at a temperature of 25°C and salinity of 0‰
	387 [g/L] at a temperature of 25°C and salinity of 35‰
	160 [g/L] at a temperature of 20°C and salinity of 0‰
	150 [g/L] at a temperature of 20°C and salinity of 5‰
	110 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	110.8
Melting Point (°C)	-95

Surface tension (mN/m)	28.52 [mN/m] at a temperature of 20°C 27.93 [mN/m] at a temperature of 25°C 29.8 [mN/m] at a temperature of 5.6°C 28.66 [mN/m] at a temperature of 11.6°C 28.01 [mN/m] at a temperature of 18.1°C
Interfacial tension (mN/m)	36.1 [mN/m] at a temperature of 25°C and salinity of 0‰
Vapour Pressure (Pa)	2932 [Pa] at a temperature of 20°C 3800 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	535
Flash Point (Pensky-Martens closed cup) (°C)	4
Flash Point (Cleveland open cup) (°C)	12.8
Lower explosivity limit (LEL) (volume %)	1.27
Upper explosivity limit (UEL) (volume %)	7.1
Vapor enthalpy (J/Kg)	360065 [J/Kg] at a temperature of 110.6°C 412480 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	40500000
Specific heat capacity (J/(Kg·K))	1707
Combustion efficiency (%)	71
Mass flow rate of the combustion surface (Kg/(m²·s))	0.11
Rad fraction (%)	60
Henry's constant (mol/(m³·Pa))	673

Behaviour at sea

Persistence (days)	1.6
Log kow	2.65
Log koc	2.25
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	30
Bioconcentration factor (BCF)	90

Additional data

Colour	incolore	
Odour	odeur irritante	
MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Standard behavior classification	FE

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	32
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	hydrocarbures aromatiques
IMO class	3.2

Reactivity data

Acid(s)	Oui
Static electricity	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	E - Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	2000

Hazard statements	**Physical**	
	H225	Highly flammable liquid and vapour.
	Health	
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H336	May cause drowsiness or dizziness.
	H361	Suspected of damaging fertility or the unborn child.
	H373	May cause damage to organs through prolonged or repeated exposure, exposure cause the hazard:
Precautionary statements	**Prevention**	
	P202	Do not handle until all safety precautions have been read and understood.
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P331	Do NOT induce vomiting.
TLV-TWA	100	
ERPG-1 (ppm)	50	
ERPG-2 (ppm)	300	
ERPG-3 (ppm)	1000	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	9.4
Lowest median lethal concentration (LC50) on crustacean (mg/l)	3.5
Lowest median lethal concentration (LC50) on fishes (mg/l)	5.4
Highest no observed effect concentration (NOEC) on algae (mg/l)	1.2
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.74
Highest no observed effect concentration (NOEC) on fishes (mg/l)	1.4
Assessment factor (AF)	100 on the short term 100 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	35 [µg/l] on the short term 7.4 [µg/l] on the long term

TOLUENEDIAMINE

Also known as: 2,4-DIAMINOTOLUENE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1000 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	122,17
Boiling Point (°C)	280
Melting Point (°C)	88/96
Vapour Pressure (Pa)	10 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	450
Flash Point (°C)	210

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Package group	III
State	solide
Family name	amines aromatiques

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

TOLUIDINES

UN Number: 1708

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1708

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	998 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	107.2
Density of gas (kg/m3)	5.031
Boiling Point (°C)	200
Melting Point (°C)	-16
Vapour Pressure (Pa)	26793 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	480
Flash Point (°C)	85

Behaviour at sea

Additional data

Colour	incolore à jaune-brun
Odour	odeur douce fruitée

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	6.1

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	1 - ≥1 and <10
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	100
TEEL-1 (mg/m3)	5 ppm
TEEL-2 (mg/m3)	5ppm
TEEL-3 (mg/m3)	50 ppm

Ecotoxicity

TRICHLORO-1,1,1 ETHANE

UN Number: 2831 - CAS Number: 71-55-6

Also known as: CHLOROETHANE, ETHANE, 1,1,1-TRICHLORO

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2831
CAS number	71-55-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1310 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	133.41
Density of gas (kg/m3)	5.934
Boiling Point (°C)	74
Melting Point (°C)	-38
Vapour Pressure (Pa)	13330 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	537
Upper explosivity limit (UEL) (volume %)	16

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur chimique

Transportation data

Package group	III
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	2 - Slightly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	1000
TLV-TWA	350
ERPG-1 (ppm)	350
ERPG-2 (ppm)	700
ERPG-3 (ppm)	3500

Ecotoxicity

Trichloro-1,2,3 Benzene

UN Number: 2810 - CAS Number: 87-61-6

> **Also known as:** 1,2,6-Trichlorobenzene, Vic-Trichlorobenzene, 1,2,3-Tcb, 1,2,3-Trcb, 1,2,3-Trichlorobenzene, Trichloro-1,2,3 Benzene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2810
CAS number	87-61-6
Formula	$C_6H_3Cl_3$

Physical chemical data

Physical State (25°C)	Solid
Kinematic viscosity (cSt)	1.16 [cSt] at a temperature of 50°C
Molar mass (g/mol)	181.46
Solubility (g/L)	18 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	218.5
Melting Point (°C)	51.3
Critical temperature (°C)	762.5
Critical pressure (Pa)	3010000
Flash Point (Pensky-Martens closed cup) (°C)	113
Henry's constant (mol/(m³·Pa))	126.7

Behaviour at sea

Log kow	4.05
Log koc	3.14
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	1300

Additional data

MARPOL pollution category	Category	Description
	X	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment.

Transportation data

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation in BCF (A1B)	4 - ≥500 and <4000
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	2 - Moderate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	S - Sinking substance that would deposit on the seabed, not likely to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Hazard statements	**Health**	
	H317	May cause an allergic skin reaction.
	Environmental	
	H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements	Prevention	
	P262	Do not get in eyes, on skin, or on clothing.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	0.08
Lowest median lethal concentration (LC50) on fishes (mg/l)	0.348
Highest no observed effect concentration (NOEC) on fishes (mg/l)	0.9

TRICHLOROETHYLENE

UN Number: 1710 - CAS Number: 79-01-6

> **Also known as:** ACETYLENE TRICHLORIDE, CHLORO ETHANE, CHLOROTEN, CHLORO THANE NU, CHLORO THENE INHIBITED, CHLORO THENE NU, CHLORO THENE VG, CHLORYLEA, CHLORYLEN, CIRCOSOLV, CRAWHASPOL, DAKERON, DENSINFLUAT, DOW-TRI, Trichloroethene, 1,1,2-Trichloroethene, Trichloroethylene

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1710
CAS number	79-01-6
Formula	C_2HCl_3

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	1460 [Kg/m³] at a temperature of 20°C 1464.2 [Kg/m³] at a temperature of 25°C
Kinematic viscosity (cSt)	0.38 [cSt] at a temperature of 25°C
Molar mass (g/mol)	131.39
Density of gas (kg/m3)	5.805
Solubility (g/L)	1100 [g/L] at a temperature of 25°C and salinity of 0‰
Boiling Point (°C)	87
Melting Point (°C)	-86
Critical temperature (°C)	544.2
Critical pressure (Pa)	5020000
Surface tension (mN/m)	29.3 [mN/m] at a temperature of 20°C
Vapour Pressure (Pa)	133330 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	410
Flash Point (°C)	32
Flash Point (Pensky-Martens closed cup) (°C)	90
Lower explosivity limit (LEL) (volume %)	8
Upper explosivity limit (UEL) (volume %)	10.5
Vapor enthalpy (J/Kg)	238987 [J/Kg] at a temperature of 87.21°C 260830 [J/Kg] at a temperature of 25°C

Combus enthalpy (J/Kg)	6560000
Specific heat capacity (J/(Kg·K))	947
Henry's constant (mol/(m³·Pa))	998

Behaviour at sea

Log kow	2.42
Log koc	1.78
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Bioconcentration factor (BCF)	39

Additional data

Colour	incolore
Odour	odeur douce

MARPOL pollution category

Category	Description
Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	36
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
Family name	hydrocarbures halogénés
IMO class	6.1

Reactivity data

Base(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation in BCF (A1B)	2 - ≥10 and <100
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic

Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	SD - Sinker/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000	
Hazard statements	**Health**	
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness.
	H341	Suspected of causing genetic defects.
	H350	May cause cancer.
	Environmental	
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	**Prevention**	
	P202	Do not handle until all safety precautions have been read and understood.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P281	Use personal protective equipment as required.
	Response	
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P391	Collect spillage.
	Storage	
	P405	Store locked up.
	Disposal	
	P501	Dispose of contents/container to ...
TLV-TWA	50	
ERPG-1 (ppm)	100	
ERPG-2 (ppm)	500	

ERPG-3 (ppm)	5000

Ecotoxicity

Lowest median lethal concentration (LC50) on fishes (mg/l)	28.3
Highest no observed effect concentration (NOEC) on algae (mg/l)	63
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	0.15
Highest no observed effect concentration (NOEC) on fishes (mg/l)	5.76
Assessment factor (AF)	500 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	11 [µg/l] on the short term

TRICHLORURE D'ANTIMOINE solide

UN Number: 1733

> **Also known as:** ANTIMONOUS CHLORIDE, ANTIMONY BUTTER, ANTIMONY CHLORIDE, ANTIMONY TRICHLORIDE solid, BUTTER OF ANTIMONY, CAUSTIC ANTIMONY

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1733

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3100 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	228
Boiling Point (°C)	223
Melting Point (°C)	73
Vapour Pressure (Pa)	130 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	blanc à jaune pâle
Odour	odeur prononcée et désagréable
Standard behavior classification	D, SD

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé

Reactivity data

Water	Oui
Acid(s)	Non

Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	16 (as Sb)
TLV-TWA	0.1 (Sb)
TEEL-1 (mg/m3)	0.937
TEEL-2 (mg/m3)	0.937
TEEL-3 (mg/m3)	93.7

Ecotoxicity

TRICHLORURE D'ARSENIL

UN Number: 1560

> **Also known as:** ARESENIOUS CHLORIDE, ARSENIC BUTTER, ARSENIC CHLORIDE, ARSENIC CHLORIDE (fuming), ARSENIC TRICHLORIDE, ARSENOUS CHLORIDE, BUTTER OF ARSENIC

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1560

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	2156 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	181.3
Boiling Point (°C)	130.4
Melting Point (°C)	-16
Vapour Pressure (Pa)	1300 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur désagréable
Standard behavior classification	D, SD

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non

Base(s)	Non
Metal(s) and alloys	Oui
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	32 (as As)
TLV-TWA	0.003 (As)
TEEL-1 (mg/m3)	0.0726 ppm
TEEL-2 (mg/m3)	1.35 ppm
TEEL-3 (mg/m3)	12.1 ppm

Ecotoxicity

TRICHLORURE DE PHOSPHORE

UN Number: 1809

Also known as: CHLORIDE OF PHOSPHORUS

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1809

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1575 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	137.33
Density of gas (kg/m3)	6.192
Boiling Point (°C)	76
Melting Point (°C)	-91
Vapour Pressure (Pa)	12700 [Pa] at a temperature of 20°C

Behaviour at sea

Persistence (days)	1.6

Additional data

Colour	incolore à jaune clair
Odour	forte odeur irritante
Standard behavior classification	DE, SD

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Oui
Acid(s)	Non
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	50
TLV-TWA	0.2
ERPG-1 (ppm)	0.5
ERPG-3 (ppm)	15

Ecotoxicity

TRIDECANOL

Also known as: ALCOHOLS C13+

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	846 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	200.37
Density of gas (kg/m3)	8.9
Boiling Point (°C)	274
Melting Point (°C)	33
Vapour Pressure (Pa)	1300 [Pa] at a temperature of 20°C
Flash Point (°C)	121

Behaviour at sea

Additional data

Colour	blanc
Odour	douce, agréable
Standard behavior classification	FE

Transportation data

Cargo group	20
Temperature (°C)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Metal(s) and alloys	Oui

Oxidizing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

TRIETHANOLAMINE

CAS Number: 102-71-6

Also known as: DALTOGEN

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	102-71-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1130 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	149.19
Density of gas (kg/m3)	6.579
Boiling Point (°C)	360
Melting Point (°C)	21
Ignition Temperature (°C)	324
Flash Point (°C)	179
Lower explosivity limit (LEL) (volume %)	3.6
Upper explosivity limit (UEL) (volume %)	7.2

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	alkanolamines

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

TRIETHYLAMINE

UN Number: 1296 - CAS Number: 121-44-8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1296
CAS number	121-44-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	729 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	101.19
Density of gas (kg/m3)	4.515
Boiling Point (°C)	89.7
Melting Point (°C)	-115
Vapour Pressure (Pa)	7198 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	230
Flash Point (°C)	-17
Lower explosivity limit (LEL) (volume %)	1.2

Behaviour at sea

Additional data

Colour	incolore
Odour	douce odeur d'ammoniac

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	amines aliphatiques
IMO class	3.2

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	1000
TLV-TWA	10
TEEL-1 (mg/m3)	3 ppm
TEEL-2 (mg/m3)	3 ppm
TEEL-3 (mg/m3)	200 ppm

Ecotoxicity

TRIETHYLBENZENE

CAS Number: 25340-18-5

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	25340-18-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	861 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	162.27
Density of gas (kg/m3)	5.354
Boiling Point (°C)	216

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur de poisson
Standard behavior classification	FD

Transportation data

Cargo group	32
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	hydrocarbures aromatiques

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7

Bioaccumulation (A1)	5 - Very high potential to bioaccumulate
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	15 ppm
TEEL-2 (mg/m3)	125 ppm
TEEL-3 (mg/m3)	600 ppm

Ecotoxicity

TRIETHYLENE GLYCOL

CAS Number: 112-27-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	112-27-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1125 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	150.17
Density of gas (kg/m3)	6.68
Boiling Point (°C)	288
Melting Point (°C)	-4
Vapour Pressure (Pa)	1299 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	370
Flash Point (°C)	177
Lower explosivity limit (LEL) (volume %)	0.9
Upper explosivity limit (UEL) (volume %)	9.2

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur chimique

Transportation data

State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	0 - Not irritating
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

TEEL-1 (mg/m3)	500
TEEL-2 (mg/m3)	500
TEEL-3 (mg/m3)	500

Ecotoxicity

TRIETHYLENETETRAMINE

UN Number: 2259 - CAS Number: 112-24-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2259
CAS number	112-24-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	982 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	146.24
Density of gas (kg/m3)	6.579
Boiling Point (°C)	277.6
Melting Point (°C)	-35
Ignition Temperature (°C)	338
Flash Point (°C)	135
Lower explosivity limit (LEL) (volume %)	1.1

Behaviour at sea

Additional data

Colour	couleur paille à ambrée
Odour	odeur douce

Transportation data

Transport mode	Vrac,Colis
Package group	II
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	amines aliphatiques

Reactivity data

Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Skin irritation/corrosivity (D1)	3 - Corrosive
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Specific Health Concern (D3)	Ss - Skin Sensitization
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TEEL-1 (mg/m3)	7.5 ppm
TEEL-2 (mg/m3)	60 ppm
TEEL-3 (mg/m3)	150 ppm

Ecotoxicity

TRIISOPROPANOLAMINE

CAS Number: 122-20-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	122-20-3

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	1020 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	191.27
Density of gas (kg/m3)	8.51
Boiling Point (°C)	300/305
Melting Point (°C)	58
Vapour Pressure (Pa)	< 500 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	320
Flash Point (°C)	160
Lower explosivity limit (LEL) (volume %)	0.8 (E)
Upper explosivity limit (UEL) (volume %)	5.1 (E)

Behaviour at sea

Additional data

Colour	blanc
Odour	légère odeur d'ammonique
Standard behavior classification	FD

Transportation data

State	solide
Family name	alkanolamines

Reactivity data

Water	Non
Acid(s)	Oui

Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	FD - Floater/Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

TRIMETHYL-1,3,5 BENZENE

UN Number: 2325 - CAS Number: 526-73-8

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2325
CAS number	526-73-8

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	800 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	120
Density of gas (kg/m3)	5.354
Vapour Pressure (Pa)	10100 [Pa] at a temperature of 20°C
Flash Point (°C)	44

Behaviour at sea

Additional data

Colour	vert
Odour	ammoniac, odeur de poisson
Standard behavior classification	DE, D

Transportation data

Package group	III
State	liquide
IMO class	3.3

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TEEL-1 (mg/m3)	140
TEEL-2 (mg/m3)	360
TEEL-3 (mg/m3)	500

Ecotoxicity

TRIMETHYLAMINE anhydre

UN Number: 1083 - CAS Number: 75-50-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1083
CAS number	75-50-3

Physical chemical data

Physical State (20°C)	Gaz
Density (kg/m3)	2.58 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	59.11
Density of gas (kg/m3)	2.58
Boiling Point (°C)	3.1
Melting Point (°C)	-117
Vapour Pressure (Pa)	62000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	190
Upper explosivity limit (UEL) (volume %)	12

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'ammoniac
Standard behavior classification	GD

Transportation data

State	liq.compr.gas
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	2(2.1)

Reactivity data

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

TLV-TWA	10
ERPG-1 (ppm)	0.1
ERPG-2 (ppm)	100
ERPG-3 (ppm)	500

Ecotoxicity

TRIMETHYLAMINE solution aqueuse (40%)

UN Number: 1297 - CAS Number: 75-50-3

Also known as: N,N-DIMETHYLMETHANAMINE Solution

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1297
CAS number	75-50-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	59.1
Density of gas (kg/m3)	2.58
Boiling Point (°C)	30
Melting Point (°C)	-3
Vapour Pressure (Pa)	62000 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	190
Upper explosivity limit (UEL) (volume %)	11.6

Behaviour at sea

Additional data

Colour	incolore
Odour	irritante
Standard behavior classification	DE

Transportation data

Transport mode	Vrac,Colis
Ship type	2 (sol. < 30%)
Package group	I/II
Family name	sol. aqueuses diverses
IMO class	3.1

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Al, Zn)
Oxidizing agents	Oui
Reducing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	DE - Dissolver/Evaporator
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

ERPG-1 (ppm)	0.1
ERPG-2 (ppm)	100
ERPG-3 (ppm)	500

Ecotoxicity

TRIMETHYLCHLOROSILANE

UN Number: 1298

Also known as: CHLOROTRIMETHYLSILANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1298

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	846 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	108.7
Density of gas (kg/m3)	4.77
Boiling Point (°C)	57
Melting Point (°C)	-58
Vapour Pressure (Pa)	7360 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	395
Flash Point (°C)	-28
Lower explosivity limit (LEL) (volume %)	1.8

Behaviour at sea

Additional data

Colour	incolore
Odour	piquante, irritante

Transportation data

Package group	II
State	liquide
Temperature (°C)	ambiante
IMO class	3.1

Reactivity data

Water	Oui

GESAMP Hazard profile

Human toxicity threshold

ERPG-2 (ppm)	20
ERPG-3 (ppm)	150

Ecotoxicity

TRIMETHYLENEDIAMINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	888 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	74.12
Melting Point (°C)	-12
Flash Point (°C)	48

Behaviour at sea

Additional data

Transportation data

State	liquide

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

TRIMETHYLHEXAMETHYLENEDIAMINE (2,2,4 et 2,4,4)

UN Number: 2327 - CAS Number: 26520-58-0

Also known as: 1,6-DIAMINO-2,2,4(2,4,4)-TRIMETHYLHEXANE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2327
CAS number	26520-58-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	867 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	158.29
Density of gas (kg/m3)	7.06
Boiling Point (°C)	232
Melting Point (°C)	-80
Vapour Pressure (Pa)	< 7 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	350
Flash Point (°C)	127
Lower explosivity limit (LEL) (volume %)	1.2

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur nauséabonde d'amine

Transportation data

Transport mode	Vrac,Colis
Package group	III
State	liquide

Family name	amines aliphatiques

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

TRINITROANISOLE

UN Number: 213

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	213

Physical chemical data

Physical State (20°C)	Solide

Behaviour at sea

Additional data

Odour	odeur perceptible

Transportation data

State	solide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
IMO class	1.1 D

Reactivity data

GESAMP Hazard profile

Human toxicity threshold

Ecotoxicity

TRIOXYDE D'ARSENIC

UN Number: 1561

> **Also known as:** ARSENIC TRIOXIDE, ARSENOUS SESQUIOXIDE, ARSENOUS ACID, ARSENOUS ACID ANHYDRIDE, ARSENOUS OXIDE, ARSODENT, CLAUDERITE, DIARSENIC TRIOXIDE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1561

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	3700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	197.8
Boiling Point (°C)	457
Melting Point (°C)	315

Behaviour at sea

Additional data

Colour	blanc
Odour	inodore

Transportation data

Package group	II
State	solide
Temperature (°C)	ambiante
Pressure (Pa)	pressurisé
IMO class	6.1

Reactivity data

Water	Non

GESAMP Hazard profile

Human toxicity threshold

IDHL	0,56
TLV-TWA	0.0012(As)
TEEL-1 (mg/m3)	0.4
TEEL-3 (mg/m3)	9.1

Ecotoxicity

TRIOXYDE DE CHROME anhydre

UN Number: 1463

Also known as: CHROMIUM TRIOXIDE anhydrous

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1463

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	2700 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	99.99
Melting Point (°C)	197

Behaviour at sea

Additional data

Colour	rouge foncé
Odour	inodore

Transportation data

Package group	II
State	solide
IMO class	5.1

Reactivity data

Metal(s) and alloys	Non
Oxidizing agents	Non
Reducing agents	Oui
Combustibles	Oui
Organic substance	Oui

GESAMP Hazard profile

Human toxicity threshold

TLV-TWA	0.012
TEEL-1 (mg/m3)	0.00962
TEEL-2 (mg/m3)	0.06
TEEL-3 (mg/m3)	28.8

Ecotoxicity

TRIPROPYLENEGLYCOL

CAS Number: 24800-44-0

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	24800-44-0

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1020 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	192.3
Density of gas (kg/m3)	8.51
Boiling Point (°C)	273
Melting Point (°C)	-45
Vapour Pressure (Pa)	130 (96�C) [Pa] at a temperature of 20°C
Flash Point (°C)	140
Lower explosivity limit (LEL) (volume %)	0.8

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique

Transportation data

Cargo group	40
State	liquide
Temperature (°C)	ambiante
Family name	glycol éthers

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	0 - Non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	0 - Not irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	0 - Is not a floater; and does not pose any known health hazards

Human toxicity threshold

TEEL-1 (mg/m3)	5 ppm
TEEL-2 (mg/m3)	35 ppm
TEEL-3 (mg/m3)	150 ppm

Ecotoxicity

UNDECANOL

UN Number: 3082 - CAS Number: 112-42-5

Also known as: ALCOHOL C-11(UNDECYLIC)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	3082
CAS number	112-42-5

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	835 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	172.3
Boiling Point (°C)	245
Melting Point (°C)	15.9
Flash Point (°C)	93

Behaviour at sea

Additional data

Colour	incolore
Odour	légère
Standard behavior classification	F/FE/E

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	20
Temperature (°C)	ambiante
Family name	alcools, glycols

Reactivity data

Water	Non

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

Ecotoxicity

UNDECENE-1

CAS Number: 821-95-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	821-95-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	750 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	154.2
Boiling Point (°C)	192.9
Vapour Pressure (Pa)	400 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur d'essence

Transportation data

Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	oléfines

Reactivity data

Water	Non
Acid(s)	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	5 - ≥5 and ≤ ca.7
Bioaccumulation (A1)	5 - Very high potential to bioaccumulate

Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	4 - Highly toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Specific Health Concern (D3)	A - Aspiration
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

UREE solution de nitrate d'ammonium

CAS Number: 57-13-6

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	57-13-6

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	1330 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	107
Vapour Pressure (Pa)	2000 [Pa] at a temperature of 20°C

Behaviour at sea

Additional data

Colour	incolore
Odour	légère odeur d'ammoniaque

Transportation data

State	liquide
Temperature (°C)	ambiante
Family name	ammoniac

Reactivity data

Water	Non
Acid(s)	Oui
Metal(s) and alloys	Oui (Cu)
Oxidizing agents	Oui
Organic substance	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF

Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

TEEL-1 (mg/m3)	10
TEEL-2 (mg/m3)	10
TEEL-3 (mg/m3)	500

Ecotoxicity

UREE solution de phosphate d'ammonium

CAS Number: 57-13-6

> **Also known as:** Amide Of Carbonic Acid, Carbamide, Carbamimidic Acid, Carbonyl Diamide, Carbonyldiamide, Carbonyldiamine, Isourea, Urea, Uree

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

CAS number	57-13-6
Formula	CH_4N_2O

Physical chemical data

Physical State (25°C)	Solid
Kinematic viscosity (cSt)	1.49 [cSt] at a temperature of 20°C
Molar mass (g/mol)	60.06
Solubility (g/L)	1080000 [g/L] at a temperature of 20°C and salinity of 0‰ 1230000 [g/L] at a temperature of 25°C and salinity of 0‰
Melting Point (°C)	132.7
Combus enthalpy (J/Kg)	9050000
Combustion efficiency (%)	95
Mass flow rate of the combustion surface (Kg/(m²·s))	0.01
Rad fraction (%)	22
Henry's constant (mol/(m³·Pa))	0

Behaviour at sea

Log kow	0
Log koc	0.9
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	50
Bioconcentration factor (BCF)	1.1

Additional data

MARPOL pollution category	Category	Description
	Z	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

Transportation data

Reactivity data

Abilities	Miscible in water.
Notable risks	Reacts with some compounds.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	0 - e <1, or > ca.7, or Mol. Wt. > 1000
Bioaccumulation in BCF (A1B)	0 - No measurable BCF
Bioaccumulation (A1)	0 - No potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	1 - Practically non-toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	1 - Slight
Skin irritation/corrosivity (D1)	1 - Mildly irritating
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	1 - Is a floater; and/or is slightly acutely toxic; and/or is mildly irritant to skin and/or eyes

Human toxicity threshold

Ecotoxicity

Lowest median lethal concentration (LC50) on crustacean (mg/l)	3910
Lowest median lethal concentration (LC50) on fishes (mg/l)	67
Highest no observed effect concentration (NOEC) on algae (mg/l)	1050
Assessment factor (AF)	47 on the short term
Predicted No Effect Concentration (PNEC) (µg/l)	1000 [µg/l] on the short term

VALERALDEHYDE

UN Number: 2058 - CAS Number: 590-86-3

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2058
CAS number	590-86-3

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	811 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	86.13
Density of gas (kg/m3)	3.87
Boiling Point (°C)	103.2
Melting Point (°C)	-91
Vapour Pressure (Pa)	6665 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	222
Flash Point (°C)	12
Lower explosivity limit (LEL) (volume %)	1.4
Upper explosivity limit (UEL) (volume %)	7.2

Behaviour at sea

Additional data

Colour	incolore
Odour	inodore

Transportation data

Package group	II
Cargo group	19
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante
Family name	aldéhydes

IMO class	3.2

Reactivity data

Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	1 - ≥1 and <2
Bioaccumulation (A1)	1 - Very low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	D - Dissolver
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

TLV-TWA	50

Ecotoxicity

VASELINE

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

Physical chemical data

Physical State (20°C)	Solide
Density (kg/m3)	900 [Kg/m³] at a temperature of 20°C
Boiling Point (°C)	302
Melting Point (°C)	36-60
Vapour Pressure (Pa)	<1.3 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	>290
Flash Point (°C)	182/221
Lower explosivity limit (LEL) (volume %)	0.9

Behaviour at sea

Additional data

Colour	vert, brun foncé
Odour	inodore
Standard behavior classification	F/FE/E

Transportation data

Cargo group	33
State	solide
Family name	mélange d'hydrocarbures

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Human toxicity threshold

TEEL-1 (mg/m3)	50
TEEL-2 (mg/m3)	350
TEEL-3 (mg/m3)	500

Ecotoxicity

VINYLTOLUENE mélange d'isomères

UN Number: 2618 - CAS Number: 25013-15-4

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2618
CAS number	25013-15-4

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	897 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	118.18
Density of gas (kg/m3)	5.289
Boiling Point (°C)	167.9
Melting Point (°C)	-77
Vapour Pressure (Pa)	339908 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	494
Flash Point (°C)	53
Lower explosivity limit (LEL) (volume %)	0.8
Upper explosivity limit (UEL) (volume %)	11

Behaviour at sea

Additional data

Colour	incolore
Odour	odeur douce

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	30
State	liquide
Temperature (°C)	ambiante
Pressure (Pa)	ambiante

Family name	oléfines
IMO class	3.3

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Non
Metal(s) and alloys	Non
Oxidizing agents	Oui
Reducing agents	Non
Combustibles	Non
Organic substance	Non

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation in BCF (A1B)	3 - ≥100 and <500
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	1 - Mildly irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

IDHL	5000
TLV-TWA	50

Ecotoxicity

WHITE SPIRIT basse teneur en aromatiques (15-20%)

UN Number: 2319

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2319

Physical chemical data

Physical State (20°C)	Liquide
Density (kg/m3)	970 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	132.2
Density of gas (kg/m3)	5.9
Boiling Point (°C)	150/190
Melting Point (°C)	1.194444444
Vapour Pressure (Pa)	200 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	210
Flash Point (°C)	-0.782608696
Lower explosivity limit (LEL) (volume %)	0.6
Upper explosivity limit (UEL) (volume %)	6.5

Behaviour at sea

Additional data

Colour	incolore
Odour	caractéristique

Transportation data

Transport mode	Vrac,Colis
Package group	III
Cargo group	33
State	liquide
Temperature (°C)	ambiante
Family name	mélange d'hydrocarbures

IMO class	3.2

Reactivity data

Water	Non
Acid(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	4 - ≥4 and <5
Bioaccumulation (A1)	4 - High potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	2 - Moderate
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	F - Floating substance, not likely to evaporate or to dissolve quickly
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity

XYLENES meta

UN Number: 1307 - CAS Number: 133-20-7

> **Also known as:** CHROMAR, DIMETHYLBENZENES, Dimethylbenzene, Methyltoluene, Xylol, Xylene, Xylene, Mixed Isomers, Xylenes (Mixed), Total Xylenes, Xylenes, Total, Mixed Xylene, Xylene (Mixed Isomers), Xylenes (Mixture)

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	1307
CAS number	133-20-7
Formula	C_8H_{10}

Physical chemical data

Physical State (20°C)	Liquide
Physical State (25°C)	Liquid
Density (kg/m3)	864 [Kg/m³] at a temperature of 20°C
	879 [Kg/m³] at a temperature of 5°C
	874.3 [Kg/m³] at a temperature of 10°C
	867.7 [Kg/m³] at a temperature of 20°C
Kinematic viscosity (cSt)	4.8 [cSt] at a temperature of 20°C
	2.3891 [cSt] at a temperature of 5°C
	2.3219 [cSt] at a temperature of 10°C
	2.2012 [cSt] at a temperature of 20°C
Molar mass (g/mol)	106.16
Solubility (g/L)	175 [g/L] at a temperature of 20°C and salinity of 0‰
	130 [g/L] at a temperature of 20°C and salinity of 0‰
	120 [g/L] at a temperature of 20°C and salinity of 5‰
	100 [g/L] at a temperature of 20°C and salinity of 30‰
Boiling Point (°C)	139
Melting Point (°C)	-48
Critical temperature (°C)	619.9
Critical pressure (Pa)	3540000

Surface tension (mN/m)	29.8 [mN/m] at a temperature of 25°C
	29.04 [mN/m] at a temperature of 5.3°C
	27.88 [mN/m] at a temperature of 10°C
	26.96 [mN/m] at a temperature of 17.9°C
Vapour Pressure (Pa)	1330 [Pa] at a temperature of 20°C
	1070 [Pa] at a temperature of 25°C
Ignition Temperature (°C)	527
Flash Point (°C)	28
Flash Point (Pensky-Martens closed cup) (°C)	25
Flash Point (Cleveland open cup) (°C)	25
Lower explosivity limit (LEL) (volume %)	1.1
Upper explosivity limit (UEL) (volume %)	7
Vapor enthalpy (J/Kg)	335892 [J/Kg] at a temperature of 140°C
	401733 [J/Kg] at a temperature of 25°C
Combus enthalpy (J/Kg)	40831000
Henry's constant (mol/(m³·Pa))	7

Behaviour at sea

Persistence (days)	0.8
Log kow	3.12
Log koc	2.58
Aqueous photolysis (Half-life)	Not photolysable
Biodegradation in estuary environment (Half-life) (days)	Not hydrolysable
Biodegradation in marine environment (Half-life) (days)	Not biodegradable
Bioconcentration factor (BCF)	15

Additional data

MARPOL pollution category	**Category**	**Description**
	Y	Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment.
Standard behavior classification	FE	

Transportation data

Package group	II
IMO class	3.2/3.3

Reactivity data

Notable risks	Reacts with oxidizers Reacts with other compounds.

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	3 - ≥3 and <4
Bioaccumulation (A1)	3 - Moderate potential to bioaccumulate
Biodegradation (A2)	NR - Not readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Chronic aquatic toxicity (B2) (NOEC (mg/l))	0 - Negligible
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	0 - Negligible
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	0 - Negligible
Skin irritation/corrosivity (D1)	2 - Irritating
Eye irritation/corrosivity (D2)	2 - Irritating
Interference with coastal amenities (E2)	FE - Floater/Evaporator
Effects on wildlife and bottom habitats (E3)	2 - Is a persistent floater; and/or is moderately acutely toxic; and/or is irritating to skin and/or eyes; and/or has long-term health effects other than carcinogenicity, mutagenicity or reprotoxicity; and/or is highly flammable; and/or is flammable and is a floater with evaporative properties

Human toxicity threshold

IDHL	1000	
Hazard statements	**Physical**	
	H226	Flammable liquid and vapour.
	Health	
	H312	Harmful in contact with skin.
	H315	Causes skin irritation.
	H332	Harmful if inhaled.
Precautionary statements	**Prevention**	
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P243	Take precautionary measures against static discharge.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	
	P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
TLV-TWA	100	
TEEL-1 (mg/m3)	150 ppm	
TEEL-2 (mg/m3)	200 ppm	
TEEL-3 (mg/m3)	900ppm	

Ecotoxicity

Lowest median lethal concentration (LC50) on algae (mg/l)	3.2
Lowest median lethal concentration (LC50) on crustacean (mg/l)	1.3
Lowest median lethal concentration (LC50) on fishes (mg/l)	2.6
Highest no observed effect concentration (NOEC) on algae (mg/l)	0.7
Highest no observed effect concentration (NOEC) on crustacean (mg/l)	1.2
Highest no observed effect concentration (NOEC) on fishes (mg/l)	> 1.3
Assessment factor (AF)	1000 on the short term 10000 on the long term
Predicted No Effect Concentration (PNEC) (µg/l)	1 [µg/l] on the short term 0.1 [µg/l] on the long term

XYLENOL

UN Number: 2261 - CAS Number: 1300-71-6

Also known as: CRESYLIC ACID, DIMETHYLPHENOL

Information on chemical

External resources

CAMEO Chemical Database
WISER Substance List

Description

UN number	2261
CAS number	1300-71-6

Physical chemical data

Physical State (20°C)	Liquide/Solide
Density (kg/m3)	1010 [Kg/m³] at a temperature of 20°C
Molar mass (g/mol)	122.2
Boiling Point (°C)	212
Melting Point (°C)	-0.571428571
Vapour Pressure (Pa)	100 [Pa] at a temperature of 20°C
Ignition Temperature (°C)	599
Flash Point (°C)	80/95
Lower explosivity limit (LEL) (volume %)	1.4

Behaviour at sea

Additional data

Colour	légèrement brun-jaunâtre
Odour	douce odeur de goudron

Transportation data

Transport mode	Vrac,Colis
Package group	II
Cargo group	21
Temperature (°C)	ambiante
Family name	phénols, crésols
IMO class	6.1

Reactivity data

Water	Non
Acid(s)	Oui
Base(s)	Oui
Oxidizing agents	Oui

GESAMP Hazard profile

Bioaccumulation in logPow (A1A)	2 - ≥2 and <3
Bioaccumulation (A1)	2 - Low potential to bioaccumulate
Biodegradation (A2)	R - Readily biodegradable
Acute aquatic toxicity (B1) (LC/EC/IC50 (mg/l))	3 - Moderately toxic
Acute mammalian toxicity by swallowing (C1) (LD50 (mg/kg))	1 - Slight
Acute mammalian toxicity by skin penetration (C2) (LD50 (mg/kg))	2 - Moderate
Acute mammalian toxicity by inhalation (C3) (LC50 (mg/l))	3 - Moderately high
Eye irritation/corrosivity (D2)	3 - Severely irritating, with irreversible corneal injury
Interference with coastal amenities (E2)	Fp - Persistent slick forming substance
Effects on wildlife and bottom habitats (E3)	3 - Is highly acutely toxic; and/or is severely irritant or corrosive to skin or eyes; and/or is carcinogenic, mutagenic or reprotoxic; and/or is a floater or persistent floater with associated health effects

Human toxicity threshold

Ecotoxicity