

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 04-Aug-2023

Revision date 21-Aug-2025

Revision Number 4

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) 15104

Safety data sheet number 15104

Product Name CAFLON OAT COOLANT

Synonyms ANTIFREEZE OAT, ANTIFREEZE CAFLON OAT, ANTIFREEZE CAFLON OAT 50% SOLUTION

Pure substance/mixture Mixture

Contains ETHANEDIOL; 2-ETHYLHEXANOIC ACID, SODIUM SALT

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Heat transfer medium

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute toxicity - Oral	Category 4*** - (H302)***
Reproductive toxicity	Category 1B*** - (H360D)***
Specific target organ toxicity — repeated exposure	Category 2*** - (H373)***

2.2. Label elements

Contains ETHANEDIOL; 2-ETHYLHEXANOIC ACID, SODIUM SALT

**Signal word**

Danger***

Hazard statements

H302 - Harmful if swallowed

H360D - May damage the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure***

Precautionary statements

P201 - Obtain special instructions before use

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P501 - Dispose of contents/ container to an approved waste disposal plant***

Unknown aquatic toxicity

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable***

3.2 Mixtures***

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
ETHANEDIOL*** 107-21-1	90 - 100%	203-473-3 (603-027-00-1)	-	STOT RE 2 (H373) Acute Tox. 4 (H302)	-	-	-
2-ETHYLHEXANOIC ACID, SODIUM SALT*** 19766-89-3	0 - 10%	243-283-8	-	Repr. 1B (H360D)***	-	-	-
DISODIUM SEBACATE*** -	0 - 10%	-	-	-	-	-	-
TOLYTRIAZOLE***	0 - 10%	-	-	Acute Tox. 4 (H302)	-	-	-

-							
POLYALKYLENE GLYCOL*** 9003-11-6	0 - 10%	-	-	Not Classified***	-	-	-
DENATONIUM BENZOATE*** 3734-33-6	0 - 10%	223-095-2	-	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) ***	-	-	-
POLYETHYLENE GLYCOL*** 25322-68-3	0 - 10%	-	-	Not Classified***	-	-	-

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures**4.1. Description of first aid measures**

General advice	Show this safety data sheet to the doctor in attendance.***
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.***

4.2. Most important symptoms and effects, both acute and delayed

Ingestion	Harmful if swallowed
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	If several ounces (60 - 100 ml) of ethylene glycol have been ingested, early administration of ethanol may counter the toxic effects (metabolic acidosis, renal damage). Consider hemodialysis or peritoneal dialysis & thiamine 100 mg plus pyridoxine 50 mg intravenously every 6 hours. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol®) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol (EG), di- or triethylene glycol (DEG, TEG), ethylene glycol butyl ether (EGBE), or methanol intoxication if available. Fomepizole protocol: loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizole until serum methanol, EG, DEG, TEG or EGBE are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. Maintain adequate ventilation and oxygenation of the patient. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity
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when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Carbon oxides.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.***

Other information Refer to protective measures listed in Sections 7 and 8.***

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Ensure adequate ventilation.***

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.***

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.***

7.3. Specific end use(s)

Specific use(s)

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	United Kingdom
ETHANEDIOL*** 107-21-1	TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ STEL: 30 mg/m ³ Sk*

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers ***

Chemical name	Oral	Dermal	Inhalation
ETHANEDIOL*** 107-21-1		106 mg/kg bw/day [4] [6]***	35 mg/m ³ [5] [6]***
2-ETHYLHEXANOIC ACID, SODIUM SALT*** 19766-89-3		2 mg/kg bw/day [4] [6]	14 mg/m ³ [4] [6]
DENATONIUM BENZOATE*** 3734-33-6		1.43 mg/kg bw/day [4] [6]	4.99 mg/m ³ [4] [6]
POLYETHYLENE GLYCOL*** 25322-68-3		112 mg/kg bw/day [4] [6]	40.2 mg/m ³ [4] [6]

[4] Systemic health effects.***

[5] Local health effects.***

[6] Long term.***

Derived No Effect Level (DNEL) - General Public ***

Chemical name	Oral	Dermal	Inhalation
ETHANEDIOL*** 107-21-1		53 mg/kg bw/day [4] [6]***	7 mg/m ³ [5] [6]***
2-ETHYLHEXANOIC ACID, SODIUM SALT*** 19766-89-3	1 mg/kg bw/day [4] [6]		3.5 mg/m ³ [4] [6]
DENATONIUM BENZOATE*** 3734-33-6	0.51 mg/kg bw/day [4] [6]		0.768 mg/m ³ [4] [6]
POLYETHYLENE GLYCOL *** 25322-68-3	40 mg/kg bw/day [4] [6]		7.14 mg/m ³ [4] [6]

[4] Systemic health effects.***
 [5] Local health effects.***
 [6] Long term.***

Predicted No Effect Concentration (PNEC) ***

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
ETHANEDIOL*** 107-21-1	10 mg/L***	10 mg/L***	1 mg/L***	10 mg/L***	
2-ETHYLHEXANOIC ACID, SODIUM SALT*** 19766-89-3	0.36 mg/L	0.493 mg/L	0.036 mg/L		
DENATONIUM BENZOATE*** 3734-33-6	0.1 mg/L	1 mg/L	10 µg/L	0.1 mg/L	
POLYETHYLENE GLYCOL *** 25322-68-3	0.273 g/L	1 mg/L	27.3 mg/L	0.1 mg/L	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
ETHANEDIOL*** 107-21-1	37 mg/kg sediment dw***	3.7 mg/kg sediment dw***	199.5 mg/L***	1.53 mg/kg soil dw***	
2-ETHYLHEXANOIC ACID, SODIUM SALT*** 19766-89-3	0.301 mg/kg sediment dw	0.0301 mg/kg sediment dw	71.7 mg/L	0.0579 mg/kg soil dw	
DENATONIUM BENZOATE*** 3734-33-6	25 mg/kg sediment dw	2.5 mg/kg sediment dw		4.95 mg/kg soil dw	
POLYETHYLENE GLYCOL *** 25322-68-3	1030 mg/kg sediment dw	103 mg/kg sediment dw		46.4 mg/kg soil dw	

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN

166.***

Hand protection	Wear suitable gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374.***
Skin and body protection	Wear suitable protective clothing.***
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.***

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear liquid
Colour	Colourless***
Odour	Mild.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No information available.
Initial boiling point and boiling range		No information available.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		No information available.
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH		No information available.
pH (as aqueous solution)		No information available.
Kinematic viscosity		No information available.
Dynamic viscosity		No information available.
Water solubility	Soluble in water	
Solubility(ies)		No information available.
Partition coefficient		No information available.
Vapour pressure		No information available.
Relative density	1.06 - 1.14	
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended storage conditions.***

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.***

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Information on likely routes of exposure**

Product Information ***

Inhalation May cause irritation.***

Eye contact May cause temporary eye irritation.***

Skin contact May cause slight irritation.***

Ingestion Harmful if swallowed.***

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document ***

ATEmix (oral) 549.50*** mg/kg***

Component Information ***

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
ETHANEDIOL***	7712 mg/kg (Rat)	> 3500 mg/kg (Mouse)***	> 2.5 mg/L (Rat) 6 h***

POLYALKYLENE GLYCOL***	> 4000 mg/kg (Rat)***	> 1000 mg/kg (Rabbit)***	-
DENATONIUM BENZOATE***	= 584 mg/kg (Rat)	> 2000 mg/kg (Rat)	= 0.2 mg/L (Rat) 4 h
POLYETHYLENE GLYCOL***	> 10000 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	> 2.5 mg/l (Rat) 6h***

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation** No information available.

POLYALKYLENE GLYCOL (9003-11-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Prolonged exposure not likely to cause significant skin irritation. Material may be handled at elevated temperatures; contact with heated material may cause thermal burns.***

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					non-irritant

Serious eye damage/eye irritation No information available.

POLYALKYLENE GLYCOL (9003-11-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause slight eye irritation Corneal injury is unlikely***

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Corneal injury is unlikely***

Respiratory or skin sensitisation No information available.

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Negative
	Human evidence	Dermal	Negative

Germ cell mutagenicity No information available.

Component Information

POLYALKYLENE GLYCOL (9003-11-6)

Method	Species	Results
	in vitro	Negative
		Negative Did not show mutagenic effects in animal experiments

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
	in vitro	Negative
		Did not show mutagenic effects in animal experiments

Carcinogenicity No information available.

Component Information

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
		Did not cause cancer in laboratory animals.

Reproductive toxicity May damage the unborn child.***

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

STOT - single exposure No information available.

POLYALKYLENE GLYCOL (9003-11-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Evaluation of available data suggests that this material is not an STOT-SE toxicant***

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Evaluation of available data suggests that this material is not an STOT-SE toxicant***

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.***

Component Information

POLYALKYLENE GLYCOL (9003-11-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					In animals, effects have been reported on the following organs after

					exposure to aerosols: Lungs***
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Aspiration hazard

No information available.

Other adverse effects

If several ounces (60 - 100 ml) of ethylene glycol have been ingested, early administration of ethanol may counter the toxic effects (metabolic acidosis, renal damage). Consider hemodialysis or peritoneal dialysis & thiamine 100 mg plus pyridoxine 50 mg intravenously every 6 hours. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol®) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol (EG), di- or triethylene glycol (DEG, TEG), ethylene glycol butyl ether (EGBE), or methanol intoxication if available. Fomepizole protocol: loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizole until serum methanol, EG, DEG, TEG or EGBE are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. Maintain adequate ventilation and oxygenation of the patient. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 12: Ecological information**12.1. Toxicity****Ecotoxicity**

Not considered to be harmful to aquatic life.***

Unknown aquatic toxicity

ETHANEDIOL (107-21-1)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
Acute toxicity***	Pimephales promelas***	LC50***	72860 mg/L ***	96 hours***	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test***	Daphnia magna***	EC50***	> 100 mg/L ***	48 hours***	

POLYALKYLENE GLYCOL (9003-11-6)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Cyprinus carpio***	LC50	> 100 mg/L	96 hours	
	Daphnia magna***	LC50***	> 100 mg/L ***	48 hours***	

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test or Equivalent.***	Pimephales promelas	LC50	87209 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test or Equivalent.***	Daphnia magna	LC50	53484 mg/L	48 hours	

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
ETHANEDIOL***	EC50: 6500 - 13000mg/L (96h, <i>Pseudokirchneriella subcapitata</i>)***	LC50: =41000mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 14 - 18mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =27540mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =40761mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 40000 - 60000mg/L (96h, <i>Pimephales promelas</i>) LC50: =16000mg/L (96h, <i>Poecilia reticulata</i>)***	-	EC50: =46300mg/L (48h, <i>Daphnia magna</i>)***
2-ETHYLHEXANOIC ACID, SODIUM SALT***	-	LC50: >100mg/L (96h, <i>Oryzias latipes</i>)	-	-

12.2. Persistence and degradability

Persistence and degradability No information available.***

ETHANEDIOL (107-21-1)

Method	Exposure time	Value	Results
OECD Test No. 301A: Ready Biodegradability: DOC Die-Away Test (TG 301 A) or Equivalent.***	10 days***	Biodegradation 90 - 100 %***	Readily biodegradable***

POLYETHYLENE GLYCOL (25322-68-3)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D) or Equivalent.***	20 days	Biodegradation > 60 %	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation MATERIAL DOES NOT BIOACCUMULATE.

Component Information

Chemical name	Partition coefficient
ETHANEDIOL***	-1.36***
2-ETHYLHEXANOIC ACID, SODIUM SALT***	1.3***
POLYALKYLENE GLYCOL***	1 - 4.4
DENATONIUM BENZOATE***	2.2***

12.4. Mobility in soil

Mobility in soil Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
ETHANEDIOL***	The substance is not PBT / vPvB***
2-ETHYLHEXANOIC ACID, SODIUM SALT***	The substance is not PBT / vPvB
DENATONIUM BENZOATE***	The substance is not PBT / vPvB
POLYETHYLENE GLYCOL***	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**National regulations**

Authorisations and/or restrictions on use:

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).***

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA

Contact supplier for inventory compliance status

DSL/NDSL

Contact supplier for inventory compliance status

EINECS/ELINCS

Contact supplier for inventory compliance status

ENCS

Contact supplier for inventory compliance status

IECSC

Contact supplier for inventory compliance status

KECI

Contact supplier for inventory compliance status

PICCS

Contact supplier for inventory compliance status

AIIC

Contact supplier for inventory compliance status

NZIoC

Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment**Chemical Safety Report**

No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet**

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed

H360D - May damage the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure***

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average)

Ceiling Maximum limit value

+ Sensitisers

STEL

*

STEL (Short Term Exposure Limit)

Skin designation

Revision Note ***Indicates updated data since last publication

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute oral toxicity***

Acute dermal toxicity***

Acute inhalation toxicity - gas***

Acute inhalation toxicity - vapour***

Acute inhalation toxicity - dust/mist***

Skin corrosion/irritation***

Serious eye damage/eye irritation***

Respiratory sensitisation***

Skin sensitisation***

Mutagenicity***

Carcinogenicity***

STOT - single exposure***

STOT - repeated exposure***

Acute aquatic toxicity***

Chronic aquatic toxicity***

Aspiration hazard***

Ozone***

Method Used

Calculation method***

Calculation method***

Calculation method***

Calculation method***

Calculation method***

Calculation method***

Calculation method***

Calculation method***

Calculation method***

Calculation method***

Calculation method***

Calculation method***

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Calculation method***

Calculation method***

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

Environmental Protection Agency

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

U.S. National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

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This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer

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End of Safety Data Sheet