

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

Supersedes date 30-Aug-2018

Revision date 15-Oct-2025

Revision Number 3

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

1.1. Product identifier

Product Code(s) 15098

Safety data sheet number 15098

Product Name ANTIFREEZE 48 BLUE GREEN SOLUTIONS

Synonyms ANTIFREEZE 48 50% SOL, ANTIFREEZE 48 GREEN 50% SOL, ANTIFREEZE 48 BLUE GREEN 50% SOL, ANTIFREEZE G48 40%, ANTIFREEZE G48 GREEN 50% SOL

Pure substance/mixture Mixture

Contains ETHANEDIOL; 2-ETHYLHEXANOIC ACID, SODIUM SALT; DISODIUM TETRABORATE ANHYDROUS

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

Recommended use Antifreeze liquid
Coolant
Restricted to professional users

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 - (H360FD)

Specific target organ toxicity — repeated exposure

Category 2 - (H373)

2.2. Label elements

Contains ETHANEDIOL; 2-ETHYLHEXANOIC ACID, SODIUM SALT; DISODIUM TETRABORATE ANHYDROUS

**Signal word**

Danger

Hazard statements

H302 - Harmful if swallowed

H360FD - May damage fertility. May damage the unborn child

H373 - May cause damage to the following organs through prolonged or repeated exposure: Kidneys

Restricted to professional users

Precautionary statements

P201 - Obtain special instructions before use

P260 - Do not breathe vapours/spray

P264 - Wash skin thoroughly after handling

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

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

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

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	40 - 50%	203-473-3 (603-027-00-1)	-	Acute Tox. 4 (H302) STOT RE 2 (H373)	-	-	-
2-ETHYLHEXANOIC ACID, SODIUM SALT 19766-89-3	1 - 5%	243-283-8	-	Repr. 1B (H360D)	-	-	-
DISODIUM	1 - 5%	241-300-3	-	Eye Irrit. 2 (H319)	-	-	-

SEBACATE 17265-14-4							
DISODIUM TETRABORATE ANHYDROUS 1330-43-4	< 1%	215-540-4	-	Eye Irrit. 2 (H319) Repr. 1B (H360FD)	-	-	-

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

Chemical name	CAS No	SVHC candidates
DISODIUM TETRABORATE ANHYDROUS	1330-43-4	X

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Get medical attention if symptoms occur.
Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink plenty of water. Get immediate medical attention.

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

Inhalation	In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.
Eyes	May cause temporary eye irritation.
Dermal	Prolonged contact may cause redness and irritation.
Ingestion	Harmful if swallowed Ingestion may cause: Unconsciousness May cause damage to organs through prolonged or repeated exposure if swallowed Kidneys

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,
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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. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	The product is not flammable. Use extinguishing agent suitable for type of surrounding fire.
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

Specific hazards arising from the chemical	Exposure to combustion products may be a hazard to health.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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. Cool containers with flooding quantities of water until well after fire is out. Collect contaminated fire extinguishing water separately. Do not allow it to enter drains or surface water.
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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. Ensure adequate ventilation. Avoid contact with eyes and skin. Avoid breathing vapours or mists. Use personal protection recommended in Section 8. Do not touch or walk through spilled material. Keep unnecessary and unprotected personnel from entering.
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	Do not allow runoff to sewer, waterway or ground. Local authorities should be advised if significant spillages cannot be contained.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
Methods for cleaning up	Clean contaminated objects and areas thoroughly observing environmental regulations.
Prevention of secondary hazards	Observe good chemical hygiene practices.

6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling	Handle all packages and containers carefully to minimise spills. Ensure adequate ventilation. Avoid contact with skin and eyes.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash hands before breaks and immediately after handling the product. Take off all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a cool, well-ventilated place. Keep/store only in original container. Store locked up.
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7.3. Specific end use(s)

Specific use(s)	See section 1 for more information.
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Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
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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 (particulate) TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ (vapour) Sk*
DISODIUM TETRABORATE ANHYDROUS 1330-43-4	TWA: 1 mg/m ³ STEL: 3 mg/m ³

Biological occupational exposure	This product, as supplied, does not contain any hazardous materials with biological limits
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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]
DISODIUM SEBACATE 17265-14-4		10 mg/kg bw/day [4] [6]	35.26 mg/m ³ [4] [6]
DISODIUM TETRABORATE ANHYDROUS 1330-43-4		68 mg/kg/day [4] [6]	2.52 mg/m ³ [5] [7] 2.52 mg/m ³ [5] [6] 1.45 mg/m ³ [4] [6]

[4] Systemic health effects.
 [5] Local health effects.
 [6] Long term.
 [7] Short 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]
DISODIUM SEBACATE 17265-14-4	5 mg/kg bw/day [4] [6]		8.7 mg/m ³ [4] [6]
DISODIUM TETRABORATE ANHYDROUS 1330-43-4	0.17 mg/kg [4] [6] 0.17 mg/kg [4] [7]	34.3 mg/kg/day [4] [6]	2.52 mg/m ³ [5] [7] 2.52 mg/m ³ [5] [6] 0.73 mg/m ³ [4] [6]

[4] Systemic health effects.
 [5] Local health effects.
 [6] Long term.
 [7] Short 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		
DISODIUM SEBACATE 17265-14-4	0.018 mg/L	0.18 mg/L	0.0018 mg/L	0.18 mg/L	
DISODIUM TETRABORATE ANHYDROUS 1330-43-4	2.9 mg/L	13.7 mg/l	2.9 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	
DISODIUM SEBACATE 17265-14-4	0.548 mg/kg sediment dw	0.0548 mg/kg sediment dw	10 mg/L	0.0988 mg/kg soil dw	
DISODIUM TETRABORATE ANHYDROUS 1330-43-4			10 mg/L	5.7 mg/kg	

8.2. Exposure controls

Engineering controls

Ensure adequate ventilation. Ensure that eyewash stations and safety showers are close to the workstation location. Use engineering controls to keep exposures below the OEL or DNEL.

Personal protective equipment

Eye/face protection

Tight sealing safety goggles. Use eye protection according to EN 166.

Hand protection

Chemical resistant gloves required for prolonged or repeated contact. Gloves must conform to standard EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Examples of acceptable glove barrier materials include: Butyl rubber. Polyvinyl chloride (PVC).

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)	Butyl rubber Polyvinyl chloride (PVC)		>= 8 hours

Skin and body protection

Wear appropriate clothing to prevent reasonably probable skin contact.

Respiratory protection

In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P3). EN 136/140/141/145/143/149.

Recommended filter type:

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash hands before breaks and immediately after handling the product. Take off all contaminated clothing and wash it before reuse.

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Appearance	Clear liquid
Colour	Green
Odour	Mild.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	< -18 °C	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)	7	No information available.
Kinematic viscosity		No information available.
Dynamic viscosity	20 - 30 cSt	@ 20 °C.
Water solubility	Soluble in water	No information available.
Solubility(ies)		No information available.
Partition coefficient		Not applicable.
Vapour pressure		Mixture.
Relative density	~ 1.12	No information available.
Bulk density		@ 20 °C.
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	None known.
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10.2. Chemical stability

Stability	Stable under recommended storage conditions.
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Explosion data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Hazardous polymerisation does not occur.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
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10.5. Incompatible materials

Incompatible materials Strong oxidising agents. Strong acids. Strong bases. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of: CARBON. Aldehydes. Ketones.

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

Inhalation	Inhalation of vapours in high concentration may cause irritation of respiratory system.
Eye contact	May cause temporary eye irritation.
Skin contact	Prolonged or repeated exposure may cause: Erythema (skin redness). Irritation.
Ingestion	Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Kidneys.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Irritation.

Acute toxicity**Numerical measures of toxicity**

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

ATEmix (oral) 1,036.70 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
DISODIUM SEBACATE	> 5000 mg/kg (Rat)	-	-
DISODIUM TETRABORATE ANHYDROUS	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2 mg/m ³ (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data the classification criteria are not met.

ETHANEDIOL (107-21-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Brief contact is essentially non-irritating to skin. Prolonged contact may cause slight skin irritation with

					local redness
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DISODIUM SEBACATE (17265-14-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Prolonged contact is essentially nonirritating to skin.

DISODIUM TETRABORATE ANHYDROUS (1330-43-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit	Dermal			non-irritant

Serious eye damage/eye irritation Based on available data the classification criteria are not met.

ETHANEDIOL (107-21-1)

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

DISODIUM SEBACATE (17265-14-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes serious eye irritation

DISODIUM TETRABORATE ANHYDROUS (1330-43-4)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD 492	Rabbit	eye			Irritant

Respiratory or skin sensitisation Based on available data the classification criteria are not met.

ETHANEDIOL (107-21-1)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

Germ cell mutagenicity Based on available data the classification criteria are not met.

Component Information
ETHANEDIOL (107-21-1)

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

Carcinogenicity Based on available data the classification criteria are not met.

Component Information
ETHANEDIOL (107-21-1)

Method	Species	Results
		Did not cause cancer in laboratory animals.

Reproductive toxicity

Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	United Kingdom
DISODIUM TETRABORATE ANHYDROUS	Repr. 1B

ETHANEDIOL (107-21-1)

Method	Species	Results
		Based on animal studies, ingestion of very large amounts of ethylene glycol appears to be the major and possibly only route of exposure to produce birth defects. Exposures by inhalation or skin contact, the primary routes of occupational exposure, had minimal effect on the fetus, in animal studies.

STOT - single exposure

Based on available data the classification criteria are not met.

ETHANEDIOL (107-21-1)

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.

H373 - May cause damage to the following organs through prolonged or repeated exposure: Kidneys.

Component Information**ETHANEDIOL (107-21-1)**

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Observations in humans include: Nystagmus (involuntary eye movement). In animals, effects have been reported on the following organs: Kidney Liver

Aspiration hazard

Based on available data the classification criteria are not met.

Other adverse effects

No information available.

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

Based on available data, the classification criteria are not met. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility

that large or frequent spills can have a harmful or damaging effect on the environment.

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	

DISODIUM TETRABORATE ANHYDROUS (1330-43-4)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Daphnia magna	LC50	1085-1402 mg/L	48 hours	
	Desmodesmus subspicatus	IC50	158 mg/L	96 hours	
	Fish	LC50	340 mg/L	96 hours	
	Bacteria toxicity	EC5	1.3 mg/L	72 hours	

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

12.2. Persistence and degradability

Persistence and degradability Expected to be readily biodegradable.

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

DISODIUM SEBACATE (17265-14-4)

Method	Exposure time	Value	Results
OECD Test No. 301E: Ready Biodegradability: Modified OECD Screening Test (TG 301 E) or Equivalent.	7 days	Biodegradation 98%	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
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ETHANEDIOL	-1.36
2-ETHYLHEXANOIC ACID, SODIUM SALT	1.3
DISODIUM SEBACATE	-3.04

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
DISODIUM SEBACATE	The substance is not PBT / vPvB
DISODIUM TETRABORATE ANHYDROUS	PBT assessment does not apply

12.6. Other adverse effects

No information available.

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

Waste from residues/unused products

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Contaminated packaging

Do not reuse empty containers. Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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).

Product restricted per REACH Annex XVII: 3

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
DISODIUM TETRABORATE ANHYDROUS - 1330-43-4	Use restricted. See item 30. Restricted Reproductive Toxin 1B	-

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/NDL	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/NDL - 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 Chemical Safety Assessment has been carried out for this substance/mixture

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
 H319 - Causes serious eye irritation
 H360D - May damage the unborn child
 H360FD - May damage fertility. 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:
 PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
 vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note **SDS sections updated 1 2 3 4 5 6 7 8 9 10 11 12 13 15 16**

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	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