SAFETY DATA SHEET

K-Seal Ultimate

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

1.1. Product identifier	
Product name	K-Seal Ultimate
Product number	K3501
1.2. Relevant identified uses o	f the substance or mixture and uses advised against
Identified uses	Additive for engine cooling systems.
Uses advised against	No specific uses advised against are identified.
1.3. Details of the supplier of the	ne safety data sheet
Supplier	K-Seal International Ltd. Unit 1 Plumpton Green Studios St Helena Lane, Lewes, East Sussex, BN7 3DQ UK
4 -	+44 (0) 1273 891162 +44 (0) 1273 890704 enquiries@kseal.com
1.4. Emergency telephone nun	
Emergency telephone	+44 (0) 1273 891162 Monday - Friday 09:00 - 17:00h
SECTION 2: Hazards identifica	ation
2.1. Classification of the substact Classification Physical hazards	Not Classified
Health hazards	Eye Irrit. 2 - H319 Skin Sens. 1 - H317
Environmental hazards	Aquatic Chronic 3 - H412
Classification (67/548/EEC or 1999/45/EC)	Xi; R36. R52/53, R43
2.2. Label elements	
Pictogram	



Signal word	Warning
Hazard statements	H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.

Precautionary statements	 P102 Keep out of reach of children. P273 Avoid release to the environment. P302+P352 IF ON SKIN: Wash with plenty of 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. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P501 Dispose of contents/container in accordance with national regulations.
Contains	Reaction mass of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-Methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)
Supplementary precautionary statements	 P261 Avoid breathing vapour/spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P321 Specific treatment (see medical advice on this label). P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures		
Propane-1,2-diol		25 - <50%
CAS number: 57-55-6	EC number: 200-338-0	
Classification	Classification (67/548/EEC or 1999/45/EC)	
Not Classified		
bis(D-Gluconato-O1,O2)zinc		1 - <2.5%
CAS number: 4468-02-4	EC number: 224-736-9	
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification	Classification (67/548/EEC or 1999/45/EC)	
Aquatic Acute 1 - H400	N; R50/53	
Aquatic Chronic 1 - H410		
4-Nonylphenol, branched, ethoxylated		1 - <2.5%
CAS number: 127087-87-0	EC number: 500-315-8	
Classification	Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315	Xi; R41, R38. R52/53	
Eye Dam. 1 - H318		
Aquatic Chronic 3 - H412		

Disodium tetraborate decahydrate			1 - <2.5%
CAS number: 1330-43-4	EC number: 215-54	40-4	
Classification Repr. 1B - H360FD		Classification (67/548/EEC or 1999/45/EC) Repr. Cat. 1 R60, R61	
Copper			0.5 - <1%
CAS number: 7440-50-8	EC number: 231-15	59-6	
M factor (Acute) = 1			
Classification Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412		Classification (67/548/EEC or 1999/45/EC) N; R50. R52/53	
Reaction mass of: 5-Chloro-2-methyl-4- [EC no. 247-500-7] and 2-Methyl-4-isot 220-239-6] (3:1)			<0.025%
CAS number: 55965-84-9			
M factor (Acute) = 10	M factor (Chronic) =	= 10	
Classification Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		Classification (67/548/EEC or 1999/45/EC) T; R23/24/25. C; R34. N; R50/53. R43	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
Skin contact	It is important to remove the substance from the skin immediately. Remove contamination with soap and water or recognised skin cleansing agent. Get medical attention if symptoms are severe or persist after washing. In the event of any sensitisation symptoms developing, ensure further exposure is avoided.

Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.
4.2. Most important symptoms	and effects, both acute and delayed
General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Spray/mists may cause respiratory tract irritation. Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach.
Skin contact	The product contains a small amount of sensitising substance. May cause an allergic skin reaction.
Eye contact	Irritating to eyes.
4.3. Indication of any immedia	te medical attention and special treatment needed
Notes for the doctor	Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.
SECTION 5: Firefighting meas	sures
5.1. Extinguishing media	
Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from	om the substance or mixture
Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Carbon dioxide (CO2). Carbon monoxide (CO).
5.3. Advice for firefighters	
Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.
SECTION 6: Accidental release measures	

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautionsDo not touch or walk into spilled material. Keep unnecessary and unprotected personnel away
from the spillage. Avoid contact with skin and eyes. Wear protective clothing as described in
Section 8 of this safety data sheet. Follow precautions for safe handling described in this
safety data sheet. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Do not empty into drains. Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. For waste disposal, see Section 13. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Do not handle broken packages without protective equipment. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid discharge to the aquatic environment. Do not reuse empty containers.	
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.	
7.2. Conditions for safe storage	e, including any incompatibilities	
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage.	
Storage class	Miscellaneous hazardous material storage.	
7.3. Specific end use(s)		
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.	
SECTION 8: Exposure Controls	s/personal protection	
8.1. Control parameters Occupational exposure limits Propane-1,2-diol		
Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates		
Disodium tetraborate decahydrate		
Long-term exposure limit (8-hour TWA): WEL 1 mg/m³		
Copper		
Long-term exposure limit (8-hour TWA): WEL 0.2 mg/m³ fume as Cu		
WEL = Workplace Exposure Li	nit	

8.2. Exposure controls

Protective equipment





Appropriate engineering controls	Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Wear chemical splash goggles.
Hand protection	Wear protective gloves made of the following material: Rubber (natural, latex). Polyvinyl chloride (PVC). Nitrile rubber. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Keep container tightly sealed when not in use. Avoid release to the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Light brown.
Odour	Mild.
Odour threshold	Not available.
рН	pH (concentrated solution): 5.4-6.4
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.031-1.055 @ 21.1°C/70°F
Bulk density	8.6-8.8 lb/Ga

Solubility(ies)	Not known.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not applicable.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.
9.2. Other information	
Volatility	~50%
SECTION 10: Stability and rea	activity
10.1. Reactivity	
Reactivity	See the other subsections of this section for further details.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
10.3. Possibility of hazardous	reactions
Possibility of hazardous reactions	No potentially hazardous reactions known.
10.4. Conditions to avoid	
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
10.5. Incompatible materials	
Materials to avoid	Strong oxidising agents.
10.6. Hazardous decomposition	on products
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.
SECTION 11: Toxicological in	formation
11.1. Information on toxicologi	cal effects
<u>Acute toxicity - oral</u> Notes (oral LD₅)	Based on available data the classification criteria are not met.
Acute toxicity - dermal Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.
Skin corrosion/irritation Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritation Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation	
Nospiratory Scholusalion	

Respiratory sensitisation	Based on available data the classification criteria are not met.	
Skin sensitisation Skin sensitisation	Sensitising. May cause an allergic skin reaction.	
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.	
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.	
IARC carcinogenicity	Contains a substance which may be potentially carcinogenic. IARC Group 2B Possibly carcinogenic to humans.	
Reproductive toxicity		
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.	
Reproductive toxicity - development	Based on available data the classification criteria are not met.	
Specific target organ toxicity -	single exposure	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.	
Specific target organ toxicity -	repeated exposure	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.	
Aspiration hazard		
Aspiration hazard	Based on available data the classification criteria are not met.	
General information	Avoid contact during pregnancy/while nursing. May damage fertility. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.	
Inhalation	Spray/mists may cause respiratory tract irritation. Prolonged inhalation of high concentrations may damage respiratory system.	
Ingestion	Gastrointestinal symptoms, including upset stomach.	
Skin contact	May cause an allergic skin reaction. May cause sensitisation by skin contact.	
Eye contact	Irritating to eyes.	
Route of entry	Ingestion Inhalation Skin and/or eye contact	
Target organs	No specific target organs known.	
Medical considerations	Skin disorders and allergies.	
Toxicological information on in	gredients.	
	bis(D-Gluconato-O1,O2)zinc	
Toxicological effe	Not regarded as a health hazard under current legislation.	
	4-Nonylphenol, branched, ethoxylated	
Skin corrosion/irritation		
Animal data	Irritating.	
Serious eye dam	age/irritation	

Serious eye damage/irritation	Causes serious eye damage.	
	Copper	
Toxicological effects	Not regarded as a health hazard under current legislation.	
Acute toxicity - oral		
Notes (oral LD₅₀)	LD₅₀ >2500 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Acute toxicity - dermal		
Notes (dermal LD₅₀)	LD_{50} >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Acute toxicity - inhalation		
Notes (inhalation LC_{50})	LD_{50} >5.11 mg/l, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.	
Skin corrosion/irritation		
Animal data	Dose: 0.5 g, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.	
Skin sensitisation		
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.	
Germ cell mutagenicity		
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.	
Genotoxicity - in vivo	DNA damage and/or repair: Negative. REACH dossier information. Based on available data the classification criteria are not met.	
Reproductive toxicity		
Reproductive toxicity - fertility	Two-generation study - NOAEL 1000 ppm, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.	
Aspiration hazard		
Aspiration hazard	Not relevant.	
Reaction mass of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-Methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)		
Acute toxicity - oral		
Notes (oral LD₅₀)	Toxic if swallowed.	
ATE oral (mg/kg)	100.0	
Acute toxicity - dermal		
Notes (dermal LD₅₀)	Toxic in contact with skin.	
	200.0	

300.0

ATE dermal (mg/kg)

	Acute toxicity - inhalation	
	Notes (inhalation LC ₅₀)	Toxic if inhaled.
	ATE inhalation (vapours mg/l)	3.0
	Skin corrosion/irritation	
	Animal data	Corrosive to skin.
	Serious eye damage/irritati	on
	Serious eye damage/irritation	Corrosivity to eyes is assumed.
	Skin sensitisation	
	Skin sensitisation	Sensitising.
SECTION 12	2: Ecological Information	
12.1. Toxicit	у	
Toxicity	Aquatic	Chronic 3 - H412 Harmful to aquatic life with long lasting effects.
Ecological ir	nformation on ingredients.	
		bis(D-Gluconato-O1,O2)zinc
	Toxicity	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.
	Acute aquatic toxicity	
	LE(C)50	$0.1 < L(E)C50 \le 1$
	M factor (Acute)	1
	Chronic aquatic toxicity	
	M factor (Chronic)	1
		4-Nonylphenol, branched, ethoxylated
	Toxicity	Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.
		Copper
	Toxicity	Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412 Very toxic to aquatic life with long lasting effects.
	Acute aquatic toxicity	
	LE(C)50	$0.1 \le L(E)C50 \le 1$
	M factor (Acute)	1
	Acute toxicity - fish	LC₅₀, 96 hours: 0.2 mg/l, Onchorhynchus mykiss (Rainbow trout)
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 0.529 mg/l, Daphnia magna

Short term toxicity - NOEC, 45 days: 11.4 μg/l, Onchorhynchus mykiss (Rainbow trout) **embryo and sac fry stages**

Reaction mass of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-Methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)

ToxicityAquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long
lasting effects.

Acute aquatic toxicity

LE(C)₅₀	$0.01 \le L(E)C50 \le 0.1$
M factor (Acute)	10
Chronic aquatic toxicity	
M factor (Chronic)	10

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

bis(D-Gluconato-O1,O2)zinc

Persistence and degradability	The degradability of the product is not known.	
	4-Nonylphenol, branched, ethoxylated	
Persistence and degradability	The degradability of the product is not known.	
	Copper	
Persistence and degradability	The product contains inorganic substances which are not biodegradable.	
Reaction mass of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-Methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)		
Persistence and degradability	The degradability of the product is not known.	
12.3. Bioaccumulative potential		
Bioaccumulative potential	No data available on bioaccumulation.	
Partition coefficient	Not available.	
Ecological information on ingredients.		
	bis(D-Gluconato-O1,O2)zinc	
Bioaccumulative potential No data available on bioaccumulation.		
	4-Nonylphenol, branched, ethoxylated	

Bioaccumulative potential No data available on bioaccumulation.

Copper

Bioaccumulative potential Not relevant.

Reaction mass of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-Methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility

The product is water-soluble and may spread in water systems.

Ecological information on ingredients.

bis(D-Gluconato-O1,O2)zinc

Mobility

No data available.

4-Nonylphenol, branched, ethoxylated

Mobility

No data available.

Copper

Mobility The product is insoluble in water.

Reaction mass of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-Methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)

Mobility

No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB. assessment

Ecological information on ingredients.

bis(D-Gluconato-O1,O2)zinc

Results of PBT and vPvB No data available. assessment

4-Nonylphenol, branched, ethoxylated

Results of PBT and vPvB No data available. assessment

Copper

Results of PBT and vPvB Substance is inorganic. Not relevant. assessment

Reaction mass of: 5-Chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-Methyl-4-isothiazolin-3-one

[EC no. 220-239-6] (3:1)

Results of PBT and vPvB This substance is not classified as PBT or vPvB according to current EU criteria. assessment

12.6. Other adverse effects		
Other adverse effects	None known.	
SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.	
Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.	

SECTION 14: Transport information

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.
EU legislation	 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Dangerous Preparations Directive 1999/45/EC. Dangerous Substances Directive 67/548/EEC.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Classification procedures according to Regulation (EC) 1272/2008	Eye Irrit. 2 - H319: Skin Sens. 1 - H317: : Calculation method. Aquatic Chronic 3 - H412: : Calculation method.
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Revision comments	This is first issue. Classification according to EC 1272/2008 (CLP).
Revision date	01/06/2015
SDS number	1971
Risk phrases in full	 R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R34 Causes burns. R36 Irritating to eyes. R38 Irritating to skin. R41 Risk of serious damage to eyes. R43 May cause sensitisation by skin contact. R50 Very toxic to aquatic organisms. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R60 May impair fertility. R61 May cause harm to the unborn child.

Hazard statements in full	H301 Toxic if swallowed.
	H311 Toxic in contact with skin.
	H314 Causes severe skin burns and eye damage.
	H315 Causes skin irritation.
	H317 May cause an allergic skin reaction.
	H318 Causes serious eye damage.
	H319 Causes serious eye irritation.
	H331 Toxic if inhaled.
	H360FD May damage fertility. May damage the unborn child.
	H400 Very toxic to aquatic life.
	H410 Very toxic to aquatic life with long lasting effects.
	H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.