

Section 1: Company and Product Identification

1.1 Product Identification			
Product Name Product Code Type of Product Product Form Product Group	: Super Steriliser : XP-ST : Disinfectant : Mixture : Blend		
1.2 Relevant identified uses of the substan	nce or mixture and uses advised against		
1.2.1. Relevant identified uses			
Intended for general public Main use category Use of the substance/mixture	: Industrial use, Professional use, : Disinfectant		
1.2.2 Uses advised against			
No additional information available			
1.3 Details of the supplier of the safety da	ta sheet		
Expert Range Old Bank, The Triangle, Poulton, BS32 7LE Bristol – United Kingdom T: 0044 2036 273720 – F: 0044 8727 433720 support@expertrange.co.uk – www.expertrange	.co.uk		
1.4 Emergency telephone number			
Emergency number	: 0044 2036 273720		
	Section 2: Hazards Identification		
2.1 Classification of the Substance or Mixture			
Classification according to Regulation (EC) No.	1272/2008 [CLP]		
Skin corrosion/irritation, Category 2	H315		
Serious eye damage/eye irritation, Category 1	H318		
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400		
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411		
Full text of H statements : see section 16			
Adverse physicochemical, human health and environmental effects			
Causes skin irritation. Causes serious eve dama	ge. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.		

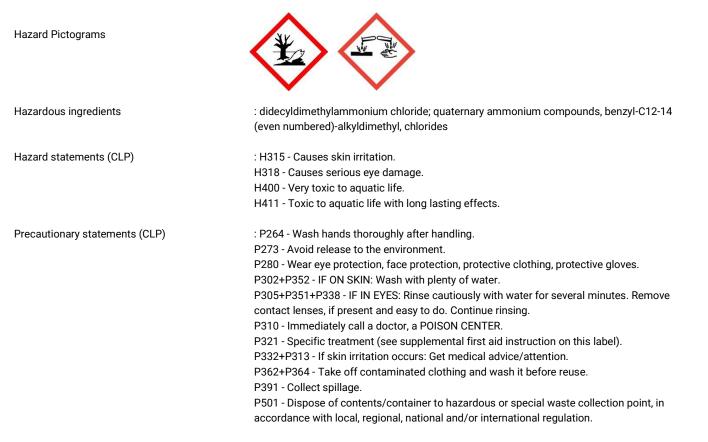
Causes skin irritation. Causes serious eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

2.2 GHS Label Elements

EN (English)







Other Hazards 23

No Additional Information Available

Section 3: Composition / Information on Ingredients

3.1 Substances

Not Applicable

3.2 **Other Information**

NAME	PRODUCT IDENTIFIER	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
didecyldimethylammonium chloride	(CAS-No.) 7173-51-5 (EC-No.) 230-525-2 (EC Index-No.) 612-131-00-6	1-3	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
quaternary ammonium compounds, benzyl-C12-14 (even numbered)- alkyldimethyl, chlorides	(EC-No.) 939-350-2 (REACH-no) 01-2119970550- 39-0000	1-3	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
propan-2-ol; isopropyl alcohol; isopropanol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0 (REACH-no) 01-2119457558- 25-XXXX	0.1 - 3	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H-statements: see section 16



Section 4: First Aid Measures

4.1 Description of first aid measures				
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).			
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Assure fresh air breathing. Allow the victim to rest.			
First-aid measures after skin contact	: Take off contaminated clothing. Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.			
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a physician immediately.			
First-aid measures after ingestion	: Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.			
4.2 Most Important Symptoms and Effects, Acute and Delayed				
Symptoms/effects after skin contact	: Irritation.			
Symptoms/effects after eye contact	: Serious damage to eyes.			
4.3. Indication of any immediate medical attention and special treatment needed				
Treat symptomatically.				

Section 5: Firefighting Measures

5.1 Extinguishing media	
Suitable extinguishing media	: Sand. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2 Special hazards arising from t	the substance or mixture
Hazardous decomposition products in case of fire	: Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx).
5.3 Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.



Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and		
eyes.		
: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".		
: Ventilate area.		

6.2 Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and material for containment and cleaning up			
For containment	: Stop leak without risks if possible. Collect spillage.		
Methods for cleaning up	: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.		
Other information : Dispose of materials or solid residues at an authorized site.			
6.4 References to Other S	ections		

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling				
Precautions for safe handling	: Ensure good ventilation of the work station. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Wear personal protective equipment.			
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.			
7.2. Conditions for safe storage,	including any incompatibilities			
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Keep container closed when not in use.			
Incompatible products	: Strong bases. Strong acids. Oxidizing agent.			
Incompatible materials	: Sources of ignition. Direct sunlight.			
Storage area	: Keep away from food, drink and animal feeding stuffs.			
7.3. Specific end use(s)				

No additional information available.



Section 8: Exposure Controls/Personal Protection

8.1. Components with Exposure Control

propan-2-ol; isopropyl alcohol; Germany	TRGS 910 Acceptable concentration notes	
United Kingdom	Local name	Propan-2-ol
United Kingdom	WEL TWA (mg/m ³)	999 mg/m ³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m ³)	1250 mg/m ³
United Kingdom	WEL STEL (ppm)	500 ppm
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE

8.2. Exposure Controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Protective goggles. Gloves. Protective clothing. Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses. Standard EN 166 - Personal eye-protection.
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: [In case of inadequate ventilation] wear respiratory protection.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke during use.

Personal protective equipment symbol(s):

Section 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Appearance	: Clear, colorless liquid.	
Colour	: Colourless.	
Odour	: characteristic.	
Odour threshold	: No data available	
рН	:~7	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: Not applicable	

EN (English)



Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 65 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1 g/cm³
Solubility	: soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Information on basic physical and chemical properties

No further information

Section 10: Stability and Reactivity

10.1. Reactivity

No additional information available The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of Hazardous Reactions

Not established.

10.4. Conditions to Avoid

Direct sunlight. Extremely high or low temperatures.



10.5. Incompatible Materials

Strong acids. Strong bases. Oxidising materials.

10.6. Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide. Nitrogen oxides.

Section 11: Toxicological Information

11.1.	Information	on toxicol	Indical	offects
11.1.	mornation		Uyicai	enecia

Acute toxicity (oral) : Not classified

Acute toxicity (dermal)

Acute toxicity (inhalation) : 1

: Not classified

: Not classified

didecyldimethylammonium chloride (7173-51-5)	
LD50 oral rat	329 mg/kg bodyweight
LD50 dermal rabbit	3342 mg/kg

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50 oral rat	5045 mg/kg
LD50 dermal rabbit	12800 mg/kg

quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides		
LD50 oral rat	397.5 mg/kg	
LD50 dermal rabbit	3412 mg/kg	

Skin corrosion/irritation	: Causes skin irritation. pH: ~ 7
Serious eye damage/irritation	: Causes serious eye damage. pH: ~ 7
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms 03/04/2020	: Based on available data, the classification criteria are not met EN (English)



Section 12: Ecological Information

12.1. Toxicity	
Ecology - general	: Very toxic to aquatic life. Before neutralisation, the product may represent a danger to aquatic organisms. Toxic to aquatic life with long lasting effects.
Ecology - water	: Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.

didecyldimethylammonium chloride (7173-51-5)	
LC50 fish 1	0.49 mg/l Zebrafish (Danio rerio)
EC50 Daphnia 1	0.029 mg/l
ErC50 (algae)	0.062 mg/l
NOEC chronic fish	0.56 mg/l
NOEC chronic algae	0.013 mg/l

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LC50 fish 1	9640 mg/I Fathead minnow (Pimephales promelas)
EC50 Daphnia 1	> 100 mg/l
EC50 72h algae (1)	> 1000 mg/l (Desmodesmus subspicatus)
EC50 96h algae (1)	> 1000 mg/l (Desmodesmus subspicatus)

quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides	
LC50 fish 1	0.85 mg/l Oncorhynchus mykiss
EC50 Daphnia 1	0.016 mg/l
ErC50 (algae)	0.03 mg/l
EC50, microorganisms	7.75 mg/l (3 Hours)
NOEC, daphnia	0.005 mg/l (48 Hours)

12.2. Persistence and Degradability

Persistence and degradability	May cause long-term adverse effects in the
	environment.
didecyldimethylammonium chloride (7173	9-51-5)
Persistence and degradability	Readily biodegradable.
Biodegradation	69 % (in 28 days)
propan-2-ol; isopropyl alcohol; isopropano	ol (67-63-0)
Persistence and degradability	Readily biodegradable.
quaternary ammonium compounds, benzy	I-C12-14 (even numbered)-alkyldimethyl, chlorides
Persistence and degradability	Readily biodegradable.
Biodegradation	63 % (in 28 days)

12.3. Bioaccumulation

XP-ST Super Steriliser		
Bioaccumulative potential	Not Established.	
didecyldimethylammonium chloride (717	73-51-5)	
Bioaccumulative potential	Low.	
propan-2-ol; isopropyl alcohol; isopropa	nol (67-63-0)	
Log Pow	0.05	
Bioaccumulative potential	No bioaccumulation.	



quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides	
Log Kow	2.75
Bioaccumulative potential	Low.

12.4. Mobility in Soil

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Surface tension	22.7 mN/m
Ecology – soil	Very mobile. Soluble material/quickly disperses in water.

12.5. Results of PBT and vPvB assessment

COMPONENT	
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides ()	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other Adverse Effects

Additional information

: Avoid release to the environment.

Section 13: Disposal Considerations

13.1. Waste treatment methods	
Waste treatment methods Product/Packaging	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport Information

14.1. UN number	
UN-No. (ADR)	: UN 1903
UN-No. (IMDG)	: UN 1903
UN-No. (IATA)	: UN 1903
UN-No. (ADN)	: UN 1903
UN-No. (RID)	: UN 1903
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides)
Proper Shipping Name (IMDG)	: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides)

EN (English)

EXPERT R A N G E

SUPER STERILISER XP-ST Safety Data Sheet According to Regulation (EC) No. 1907/2006 with Amendment (EC) No. 453/2010 Date of Issue: 03/04/2020 Version 1.0

Proper Shipping Name (IATA)	: Disinfectant, liquid, corrosive, n.o.s. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides)
Proper Shipping Name (ADN)	: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides)
Proper Shipping Name (RID)	: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides)
Transport document description (ADR)	: UN 1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides), 8, III, (E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides), 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	: UN 1903 Disinfectant, liquid, corrosive, n.o.s. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides), 8, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) Transport document description (RID)	: UN 1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides), 8, III, ENVIRONMENTALLY HAZARDOUS : UN 1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (quaternary ammonium compounds, benzyl-C12-14 (even numbered)-alkyldimethyl, chlorides), 8, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

Transport hazard class(es) (ADR)	: 8
Danger labels (ADR)	: 8
Transport hazard class(es) (IMDG)	: 8
Danger labels (IMDG)	: 8
Transport hazard class(es) (IATA)	: 8
Hazard labels (IATA)	: 8
Transport hazard class(es) (ADN)	: 8
Danger labels (ADN)	: 8
Transport hazard class(es) (RID):Danger labels (RID):	
14.4. Packing group	

	×
8	

ADR		: 111
IMDG		: 111
ΙΑΤΑ		: 111
ADN		: 111
RID		: 111
14.5	Environmental Hazards	

Dangerous for the environment	: Yes
Marine pollutant	: Yes

03/04/2020



Other information

: No supplementary information available

14.6 Special Precautions for User	
Overland transport	
Classification code (ADR)	: C9
Special provisions (ADR)	: 274
imited quantities (ADR)	: 51
xcepted quantities (ADR)	: E1
acking instructions (ADR)	: P001, IBC03, LP01, R001
ixed packing provisions (ADR)	: MP19
ank code (ADR)	: L4BN
ehicle for tank carriage	: AT
ansport category (ADR)	: 3
ecial provisions for carriage – ackages (ADR)	: V12
ard identification number mler No.)	: 80
nge Plates	80 1903
nnel restriction code (ADR)	:E
code	: 2X
P code	: B
nsport by sea	
ecial provisions (IMDG)	: 223, 274
cking instructions (IMDG)	: P001, LP01
packing instructions (IMDG)	: IBC03
S-No. (Fire)	: F-A
S-No. (Spillage)	: S-B
wage category (IMDG)	: A
perties and observations (IMDG)	: A wide variety of corrosive liquids. Causes burns to skin, eyes and mucous membranes.



Air Transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L
Inland Waterway Transport	
Classification code (ADN)	: C9
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail Transport	
Classification code (RID)	: C9
Special provisions (RID)	: 274
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80



14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not Applicable.

SECTION 15: Regulatory Information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Substances subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals: Didecyldimethylammonium chloride (7173-51-5) (CAS Number).

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

Abbreviation	ns and acronyms:
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative
Data sources	: 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

: None.

Classification according to Regulation (EC) No. 1272/2008 [CLP]:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	



Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product