

Aperlan Range

Aperlan Poka-Yoke Agent A

SECTION 1: Identification of the substance/mixture and company

1.1 Product identifier

Product code: 41010058

UFI: DQG0-T047-S00E-V1FW

Name: Aperlan Poka-Yoke Agent A

1.2 Product uses

Disinfectant for medical device. Restricted to professional users.

1.3 Supplier

Details of the supplier of the Safety Data Sheet.

Supplier:

Supplier Australia
Getinge Disinfection AB

Ljungadalsgatan 11

Supplier Australia
Getinge Australia Pty Ltd
Level 7, 11 Help Street
Chatswood NSW 2067 Australia
Telephone: 1800 438 464

SWEDEN

Supplier New Zealand
Phone: +46 (0)10 335 98 00

Web: www.getinge.com

E-mail: info@getinge.com

Supplier New Zealand
Getinge Australia (NZ Branch)
Level 2, Building B, Millenium Centre
Ellersie, Auckland 1051 New Zealand
Telephone: +64 9 272 9039

1.4 Emergency telephone number

For emergency event of spillage, inhalation or ingestion of products, please contact the emergency hotline.

EU: +44 (0) 123 523 96 70

Australia: +612 8014 4558 or 131126

Japan: +81 345 789 341 China: +86 105 100 30 39

Middle East: +44 (0) 123 523 96 71

New Zealand: +64 9 272 9039 or 0800 764 766

SECTION 2: Hazards identification (undiluted product)

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

H272	Oxidizing liquids, Category 2. May intensify fire; oxidizer.
H290	May be corrosive to metals.
H302	Acute toxicity, Category 4. Harmful if swallowed.
H314	Skin corrosion, Category 1A. Causes severe skin burns and eye damage.
H318	Serious eye damage, Category 1. Causes serious eye damage.
H332	Harmful if inhaled.
H335	Specific target organ toxicity - single exposure, Category 3. May cause respiratory irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:



Signal word:	Danger
Hazard statements:	H272 May intensify fire; oxidizer.
	H290 May be corrosive to metals.
	H302 Harmful if swallowed.
	H314 Causes severe skin burns and eye damage.
	H332 Harmful if inhaled.
	H335 May cause respiratory irritation.
Supplemental Hazard Statements:	EUH071 Corrosive to the respiratory tract.
Precautionary statements:	P220 Keep away from clothing and other combustible materials.
	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
	P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
	P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Hazardous components which must be listed on the label:

79-21-0 Peracetic acid

7722-84-1 Hydrogen peroxide

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

No special risks known.

SECTION 3: Composition/information on ingredients

Chemical nature: Solution of the following substances

Chemical name	CAS number EC-No. Index-No. Registration number	Concentration (% w/w)	Classification
Peracetic acid	79-21-0 201-186-8 607-094-00-8 01-2119531330-56-0006	2-10	Flam. Liq. 3; H226 Org. Perox. D; H242 Acute Tox. 3; H301 Acute Tox. 4; H312 Acute Tox. 2; H330 Skin Corr. 1A; H314 STOT SE 3; H335 Aquatic Acute 1; H400
Hydrogen peroxide	7722-84-1 231-765-0 008-003-00-9 01-2119485845-22-XXXX	>20	Ox. Liq. 1; H271 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1A; H314 STOT SE 3; H335 Aquatic Chronic 3; H412
Acetic acid	64-19-7 200-580-7 607-002-00-6 01-2119475328-30-XXXX	<10	Flam. Liq. 3; H226 Skin Corr. 1A; H314

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:	Take off all contaminated clothing immediately. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
Skin contact:	Wash off immediately with plenty of water. Call a physician immediately.
Inhalation:	Move the victim to fresh air and keep him calm. If symptoms persist, call a physician.
Ingestion:	Do NOT induce vomiting. Rinse mouth with water. Give small amounts of water to drink. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Fire fighting measures

5.1 Suitable Extinguishing media

Dry powder, Foam and Water spray jet.

5.2 Unsuitable Extinguishing media

Carbon dioxide (CO2)

Do not use a solid water stream as it may scatter and spread fire.

Hazardous combustion products: Oxygen.

5.3 Special hazards arising from the substance or mixture

Cool down closed containers exposed to fire with water spray.

5.4 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Handle in accordance with good industrial hygiene and safety practice.

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Do not breathe vapor.

Remove all sources of ignition.

6.2 Environmental precautions

Avoid subsoil penetration.

Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Unsuitable material for picking up:

Absorbent material, organic

Kieselguhr

Sawdust

Keep in suitable, closed containers for disposal.

Clean contaminated surface thoroughly.

Flush with water.

6.4 Reference to other sections

Observe the advice given in sections 8 and 13.

SECTION 7: Handling and storage

After opening, use within: 14 days.

7.1 Precautions for safe handling

Provide sufficient air exchange and/or exhaust in work rooms. Handle and open container with care. Never return unused material to storage receptacle.

Keep away from sources of ignition - No smoking. Keep away from combustible material. May cause or intensify fire; oxidizer.

When using do not eat or drink. Take off all contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in the original container. Suitable container and packaging materials for safe storage Plastic container of HDPE Polyethylene glass Unsuitable materials for containers Metals Store in a receptacle equipped with a vent. Keep in a bunded area.

Keep away from heat. Keep away from direct sunlight. Store in cool place. Do not keep the container sealed. Store in upright position only. Recommended storage temperature: 5 - 30°C.

- Do not store together with metals.
- Do not store together with alkalis.
- Do not store together with reducing agents.
- Do not store together with combustible substances.

7.3 Specific end use(s)

None.

SECTION 8: Exposure controls and personal protection

8.1 Control parameters

Occupational Exposure Limits

Hydrogen peroxide - CAS-No. 7722-84-1

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Value type (Form of exposure)	Control parameters	Basis
WEL	1 ppm	HSE
	1.4 mg/m3	
WEL	2 ppm	HSE
	2.8 mg/m3	
Permissible exposure limit	1.25 mg/m3	Biocide dossier
Short term exposure limit	1.25 mg/m3	Biocide dossier
Acetic acid - CAS-No. 64-19-7		
Value type (Form of exposure)	Control parameters	Basis
Permissible exposure limit	10 ppm	OSHA
	25 mg/m3	
Short term exposure limit	15 ppm	HSE
	37 mg/m3	
Permissible exposure limit	10 ppm	HSE
	25 mg/m3	
Permissible exposure limit	10 ppm	EC/2000/39
	25 mg/m3	
Short term exposure limit	20 ppm	EC/2000/39
	50 mg/m3	
Peracetic acid - CAS 79-21-0		
Value type (Form of exposure)	Control parameters	Basis
Permissible exposure limit	16 ppm	Biocide dossier
	0.5 mg/m3	
Short term exposure limit	16 ppm	Biocide dossier

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

0.5 mg/m3

Hydrogen peroxide

End Use	Exposure routes	Potential health effects	Value
Workers	Inhalation	Local effects, short term exposure	3 mg/m3
Workers	Inhalation	Local effects, long term exposure	1.4 mg/m3
Acetic acid			
End Use	Exposure routes	Potential health effects	Value
Workers	Inhalation	Acute local effects, short term exposure	25 mg/m3
Workers	Inhalation	Chronic effects, long term exposure	25 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Hydrogen peroxide

Environmental Compartment	Value
Fresh water	0.0126 mg/l
Marine water	0.0126 mg/l
Water	0.0138 mg/l
Effects on waste water treatment plants	4.66 mg/l
Fresh water sediment	0.047 mg/kg
Marine sediment	0.047 mg/kg
Soil	0.0023 mg/kg

Acetic acid

Environmental Compartment	Value
Fresh water	3.058 mg/l
Marine water	0.3058 mg/l
Intermittent use/release	30.58 mg/l
Effects on waste water treatment plants	85 mg/l
Fresh water sediment	11.36 mg/kg
Marine sediment	1.136 mg/kg
Soil	0.478 mg/kg

8.2 Exposure controls

Engineering measures

Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye protection:	Safety glasses with side-shields conforming to EN166 Face-shield
Hand protection:	Directive:
	The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
	Remarks:
	Prolonged contact: Nitrile rubber gloves e.g. Camatril (>120 Min., layer thickness: 0.40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0.70 mm) made by KCL or gloves from other manufacturers offering the same protection. Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection.
Skin and body protection:	Choose body protection according to the amount and concentration of the
	dangerous substance at the work place.
	Wear as appropriate:
	Chemical resistant apron
	• Boots
	• Neoprene
Respiratory protection:	If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.
	Combination filter:
	A2B2E2K2 Hg NO P3 P D/ CO 20 P3 R D
Protective measures:	Do not breathe vapor.
	Avoid contact with skin and eyes.
Personal protective equipment:	Exact PPE requirements should be determined from a specific risk
	assessment of the processes being carried out.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Colourless
Odour:	Vinegar-like
Odour Threshold:	Not determined
pH:	<1 (20 °C)
Melting point/freezing point:	< -26 °C
Decomposition temperature:	No data available
Boiling point/boiling range:	Approx. 100 °C
Flash point:	N/A
Evaporation rate:	No data available
Flammability (solid, gas):	N/A
Upper explosion limit:	No data available
Lower explosion limit:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	1.12 g/cm3 (20 °C)
Water solubility:	Completely soluble
Partition coefficient: noctanol/water	N/A
Auto-ignition temperature	No data available
Viscosity, dynamic	No data available
Explosive properties	Not explosive
Oxidizing properties	Oxidizing

9.2 Other information

Metal corrosion rate: Corrosive to metals, Aluminiums and soft steel.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Self-Accelerating decomposition temperature (SADT): >60 °C.

10.3 Possibility of hazardous reactions

Keep away from combustible material. To avoid thermal decomposition, do not overheat.

10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Reducing agents, Acid chlorides, Strong acids and strong bases, Aldehydes and Metals.

10.6 Hazardous decomposition products

Oxygen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

11.1.1 Acute toxicity

Product

Acute oral toxicity:	Acute toxicity estimate: 1,043 mg/kg Method: Calculation method
Acute inhalation toxicity:	Acute toxicity estimate: 2.52 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
Acute dermal toxicity:	Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method

Components

Peracetic acid

Acute oral toxicity:	LD50 (Rat): 85 - 153 mg/kg Assessment: Toxic if swallowed.
Acute inhalation toxicity:	LC50 (Rat): 0.204 mg/l Exposure time: 4 h
	Test atmosphere: dust/mist Assessment: Fatal if inhaled
Acute dermal toxicity:	LD50 (Rat): 1,100 mg/kg Assessment: Harmful if contact with skin

Hydrogen peroxide

Acute oral toxicity:	LD50 (Rat): 801 - 872 mg/kg
	Remarks: Harmful if swallowed.
Acute inhalation toxicity:	Assessment: The component/mixture is moderately toxic after short term inhalation. Remarks: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, Annex VI, Table 3.1.
Acute dermal toxicity:	LD50 (Rat): 6,500 mg/kg

Acetic acid

Acute oral toxicity:	LD50 (Rat): 3,310 mg/kg
Acute inhalation toxicity:	LC50 (Rat): > 39.8 mg/l
	Exposure time: 4 h
	Test atmosphere: vapour
Acute dermal toxicity:	LD50 (Rabbit): > 2,000 mg/kg

11.1.2 Skin corrosion/irritation

Product

Assessment:	Causes severe skin burns and eye damage
Method:	Calculation method

11.1.3 Serious eye damage/eye irritation

Product

Assessment:	Causes serious eye damage
Method:	Calculation method

11.1.4 Respiratory or skin sensitization

Components

Peracetic acid

Species:	Mouse
Result:	Did not cause sensitization on laboratory animals
Remarks:	Substance is not considered to be potential skin sensitizer

Hydrogen peroxide

Species: Guinea pig

Result: Did not cause sensitization on laboratory animals

Acetic acid

Result: No data available

11.1.5 Germ cell mutagenicity

Components

Peracetic acid

Germ cell mutagenicity	Germ cell effects are not relevant. The substance has been tested for mutagenicity
Assessment:	and other types of genotoxic effects in in vitro and in vivo experiments and is
	evaluated as being non-mutagenic.

Hydrogen peroxide

Genotoxicity in vitro:	Test Type: Ames test
	Result: negative
Genotoxicity in vivo:	Test Type: in vivo assay
	Remarks: Non mutagenic
Germ cell mutagenicity	Not mutagenic in Ames Test
Assessment:	

Acetic acid

Genotoxicity in vitro:	Test Type: Ames test	
	Result: negative	
Germ cell mutagenicity	Not mutagenic in Ames Test	
Assessment:		

11.1.6 Carcinogenicity

Components

Peracetic acid

Carcinogenicity No structural alerts for carcinogenicity were found
Assessment:

Hydrogen peroxide

Carcinogenicity Animal testing did not show any carcinogenic effects
Assessment:

Acetic acid

Carcinogenicity Animal testing did not show any carcinogenic effects
Assessment:

11.1.7 Reproductive toxicity

Components

Peracetic acid

Effects on fertility: Rat, Oral, NOAEL: 100 mg/l, F1: 100 mg/l

Reproductive toxicity - Animal testing did not show any effects on fertility.

Assessment:

Hydrogen peroxide

Reproductive toxicity - Animal testing did not show any effects on fertility.

Assessment:

Acetic acid

Reproductive toxicity - Animal testing did not show any effects on fertility.

Assessment:

11.1.8 STOT - single exposure

Product

Assessment: May cause respiratory irritation

11.1.9 STOT - repeated exposure

No data available.

11.1.10 Repeated dose toxicity

Components

Peracetic acid

Species:	Rat
NOAEL:	15 mg/kg
Exposure time:	90-day
Remarks:	No adverse effect has been observed in sub chronic toxicity tests

Hydrogen peroxide

Species:	Rat
NOAEL:	26 mg/kg
Application Route:	Oral
Exposure time:	3 months
Remarks:	No adverse effect has been observed in chronic toxicity tests

Species:	Rat
NOAEL:	0.0029 mg/l
Application Route:	Inhalation (vapor)
Method:	OFCD Test Guideline 407

Acetic acid

Species:	Rat
NOAEL:	1,800 mg/kg
Exposure time:	Oral

Aspiration toxicity

No data available.

Further information

Product

No data is available on the product itself., Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components., If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

SECTION 12: Ecological information

12.1 Toxicity

Components

Peracetic acid

Toxicity to fish: LC50:13 mg/l

Exposure time: 96 h

Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates:

EC50 (Daphnia magna): 3.3 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae: Remarks: No data available

Hydrogen peroxide

Toxicity to fish: LC50 (Fish): 16.4 - 37.4 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

EC50 (Daphnia magna): 2.4 mg/l

aquatic invertebrates:

Exposure time: 48 h

Toxicity to algae: ErC50 (Skeletonema costatum (marine diatom)): 1.38 mg/l

Exposure time: 72 h

NOEC (Skeletonema costatum (marine diatom)): 0.63 mg/l

Exposure time: 72 h

Acetic acid

Toxicity to fish: LC50 (Gambusia affinis (Mosquito fish)): 251 mg/l

Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna): 95 mg/l

Exposure time: 24 h

Toxicity to algae: EC100 (Euglena gracilis): 720 mg/l

Exposure time: 0.25 h

12.2 Persistence and degradability

Components

Peracetic acid

Biodegradability Result: Readily biodegradable.

Method: OECD Test Guideline 301

Hydrogen peroxide

Biodegradability Result: Totally biodegradable

Method: OECD Test Guideline 301

Acetic acid

Biodegradability Result: Totally biodegradable

Method: OECD 301D / EEC 84/449 C6

12.3 Bioaccumulative potential

Components

Peracetic acid

Bioaccumulation: Remarks: Does not bioaccumulate

Hydrogen peroxide

Bioaccumulation: Remarks: Does not bioaccumulate

Acetic acid

Bioaccumulation: Remarks: Bioaccumulation is unlikely

12.4 Mobility in soil

Components

Peracetic acid

Mobility: Medium: Water

Remarks: Hydrolyses readily

Hydrogen peroxide

Mobility: Medium: Water

Remarks: Hydrolyses readily

Acetic acid

Mobility: Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product

Assessment: This substance/mixture contains no components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB)

at levels of 0.1 % or higher.

12.6 Other adverse effects

Product

Additional ecological information: No data is available on the product itself

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: Dispose of the product according to the defined EWC (European Waste Code) No.

Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging: Take empty packaging to the recycling plant.

Waste key for the unused EWC 160903*

product:

Waste key for the unused product Peroxides, for example hydrogen peroxide

(Group):

SECTION 14: Transport information

14.1 UN number

ADR/IMDG/IATA (Cargo): UN 3149.

14.2 UN proper shipping name

ADR/IMDG/IATA (Cargo): HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED

14.3 Transport hazard class(es)

ADR/IMDG/IATA (Cargo): 5.1

14.4 Packing group

ADR

Packing group: II

Classification Code: OC1

Hazard Identification Number: 58

Labels: 5.1 (8, 11)

Tunnel restriction code: E

IMDG

Packing group: II Labels: 5.1 (8, 11) EmS Code: F-H, S-Q

IATA (Cargo)

Packing instruction (cargo aircraft): 554

Packing group: II

Labels: Oxidizer, Corrosive, above

14.5 Environmental hazards

ADR Not environmentally hazardous

IMDG Not marine pollutant

14.6 Special precautions for user

Not applicable

For personal protection see section 8.

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

N/A for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59): N/A

Regulation (EC) No 850/2004 on persistent organic pollutants: N/A

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
P8	OXIDIZING LIQUIDS AND SOLIDS	50 t	200 t

Other Regulations

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.

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

16.1 Full text of H-Statements

H226	Flammable liquid and vapor
H242	Heating may cause a fire.
H271	May cause fire or explosion; strong oxidizer.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

16.2 Full text of other abbreviations

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Flam. Liq.	Flammable liquids
Org. Perox.	Organic peroxides
Ox. Liq.	Oxidizing liquids
Skin Corr.	Skin corrosion.
STOT SE	Specific target organ toxicity - single exposure

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; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx -Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. -Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD -Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

16.3 Further information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008.

Ox. Liq. 2, H272	On basis of test data.
Acute Tox. 4, H302	Calculation method.
Skin Corr. 1A, H314	Calculation method.
Eye Dam. 1, H318	Calculation method.
STOT SE 3, H335	Calculation method.

Date of issue: 2021-03-24

This product should be stored, handled and used in accordance with good industrial practice and in conformity with legal regulations. The information in this data sheet is based on the present state of our knowledge and is intended to describe products from the point of view of safety requirements and thus should not be construed as guaranteeing specific properties. It is for users to satisfy themselves of the suitability of this product for their own applications.

