#### Safety Data Sheet

according to UK REACH Regulation Issue date: 19/09/2023 Revision date: 19/09/2023 SDS No: 00056-0350

Supersedes: 31/01/2023

Version: 2.2

**B** BRAUN

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Product form : Mixture Product name : Hexaquart XL 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses Use of the substance/mixture : Disinfectant for surfaces 1.2.2. Uses advised against No additional information available 1.3. Details of the supplier of the safety data sheet Manufacturer Supplier B. Braun Medical AG B. Braun Medical Ltd. Seesatz 17 Thorncliffe Park Estate, Brookdale Road CH-6204 Sempach - Switzerland Sheffield S35 2PW, UK - Medical Information Department T +41 (0) 58 / 258 50 00 T +44 (0)114 225 9000 info.bbmch@bbraun.com medinfo.bbmuk@bbraun.com E-mail address of competent person responsible for the SDS: sds@gbk-ingelheim.de 1.4. Emergency telephone number Emergency number : INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### **Classification according to GB CLP Regulation**

Corrosive to metals, Category 1	H290
Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
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 1	H410
Full text of H- and EUH-statements: see section 16	

#### Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

#### Labelling according to GB CLP Regulation

Hazard pictograms (CLP)



Signal word (CLP) Contains : Danger

:

D-Glucopyranose, oligomeric, C8-10 glycosides; Didecyldimethylammonium chloride; 1,3-Propanediamine, N-(3-aminopropyl)-N-dodecyl-; 2-Amino-ethanol

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Hazard statements (CLP)	: H290 - May be corrosive to metals.
	H302 - Harmful if swallowed.
	H314 - Causes severe skin burns and eye damage.
	H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P280 - Wear eye protection, face protection, protective gloves, protective clothing.
	P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
	Rinse skin with water /shower.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P310 - Immediately call a POISON CENTER, a doctor.
	P273 - Avoid release to the environment.
	P501 - Dispose of contents and container to an approved waste disposal plant.
EUH-statements	: EUH208 - Contains (R)-p-mentha-1,8-diene. May produce an allergic reaction.
Labelling according to: exemption for packa	ages of a capacity of 125ml or less
Hazard pictograms (CLP)	
	GHS05 GHS07 GHS09
Signal word (CLP)	: Danger
Hazardous ingredients	: D-Glucopyranose, oligomeric, C8-10 glycosides; Didecyldimethylammonium chloride; 1,3- Propanediamine, N-(3-aminopropyl)-N-dodecyl-; 2-Amino-ethanol
Hazard statements (CLP)	: H314 - Causes severe skin burns and eye damage.
Precautionary statements (CLP)	<ul> <li>P280 - Wear eye protection, face protection, protective gloves, protective clothing.</li> <li>P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li> </ul>
	P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
	Rinse skin with water /shower.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P310 - Immediately call a POISON CENTER, a doctor.
	P501 - Dispose of contents and container to an approved waste disposal plant.
EUH-statements	: EUH208 - Contains (R)-p-mentha-1,8-diene. May produce an allergic reaction.
2.3. Other hazards	

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 Contains no PBT/vPvB substances  $\geq$  0.1% assessed in accordance with REACH Annex XIII.

#### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

#### Comments

: Concentrate with quaternary ammonium compounds and non-ionic surfactants

Name	Product identifier	%	Classification according to GB CLP Regulation
1,3-Propanediamine, N-(3-aminopropyl)-N-dodecyl-	(CAS-No.) 2372-82-9 (EC-No.) 219-145-8 (REACH-no) 01-2119980592-29	9,9	Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 (M=10)

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Didecyldimethylammonium chloride	(CAS-No.) 7173-51-5 (EC-No.) 230-525-2 (EC Index-No.) 612-131-00-6 (REACH-no) 01-2119945987-15	6	Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
D-Glucopyranose, oligomeric, C8-10 glycosides	(CAS-No.) 68515-73-1 (EC-No.) 500-220-1 (REACH-no) 01-2119488530-36	< 5	Eye Dam. 1, H318
1,1',1",1"'- ethylenedinitrilo tetra-propan-2-ol	(CAS-No.) 102-60-3 (EC-No.) 203-041-4 (REACH-no) 01-2119552434-41	< 5	Eye Irrit. 2, H319
2-Amino-ethanol Substance with a Community workplace exposure limit	(CAS-No.) 141-43-5 (EC-No.) 205-483-3 (EC Index-No.) 603-030-00-8 (REACH-no) 01-2119486455-28	< 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1018 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412
Propan-2-ol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0 (REACH-no) 01-2119457558-25	< 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
(R)-p-mentha-1,8-diene	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5 (EC Index-No.) 601-096-00-2 (REACH-no) 01-2119529223-47	< 0,25	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
2-Amino-ethanol	(CAS-No.) 141-43-5 (EC-No.) 205-483-3 (EC Index-No.) 603-030-00-8 (REACH-no) 01-2119486455-28	(5 ≤ C < 100) STOT SE 3, H335

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Take off immediately all contaminated clothing. Call a physician immediately. Data of item 4 do partly not refer to the use and the regular employing of the product (in this sense consult package leaflet and expert information), but to liberation of major amounts in case of accidents and irregularities.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. In the event of symptoms refer for medical treatment.
First-aid measures after skin contact	: Wash off immediately with soap and plenty of water. Treat subsequently with skin cream. Get medical advice if skin irritation persists.
First-aid measures after eye contact	: Wash immediately with plenty water (during 20 minutes), also under eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Drink plenty of water. Do not induce vomiting without medical advice. Call a physician immediately.

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

Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion

- Causes severe burns.Serious damage to eyes.
- : Harmful if swallowed.

#### 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 Unsuitable extinguishing media	<ul><li>Product does not burn, fire-extinguishing activities according to surrounding.</li><li>high volume water jet.</li></ul>
5.2. Special hazards arising from the subst	tance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	<ul> <li>Non flammable.</li> <li>Product is not explosive.</li> <li>Carbon oxides (CO, CO2). Nitrous gasses. Chlorine compounds.</li> </ul>
5.3. Advice for firefighters	
Precautionary measures fire Firefighting instructions Protection during firefighting	<ul> <li>Cool endangered containers with water spray jet.</li> <li>Fight fire from safe distance and protected location.</li> <li>Do not attempt to take action without suitable protective equipment. Self-contained</li> </ul>

 Other information
 breathing apparatus. Complete protective clothing.

 Other information
 : Collect contaminated firefighting water separately, must not be discharged into the drains.

 Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

# SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures 6.1.1. For non-emergency personnel Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe Vapours. 6.1.2. For emergency responders

# Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up		
For containment	: Dike and contain spill.	
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.	
Other information	: Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections		

Refer to protective measures listed in sections 7 and 8. For further information refer to section 13.

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#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling Hygiene measures	<ul> <li>Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe Vapours. Wear personal protective equipment.</li> <li>Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
7.2. Conditions for safe storage, including	any incompatibilities
Storage conditions Incompatible materials	<ul><li>Store in a well-ventilated place. Keep container tightly closed.</li><li>oxidizing materials.</li></ul>

: Keep away from food, drink and animal feeding stuffs.

#### Information on mixed storage 7.3. Specific end use(s)

See Section 1.

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Propan-2-ol (67-63-0)		
United Kingdom - Occupational Exposure Limits		
Local name	Propan-2-ol	
WEL TWA (OEL TWA) [1]	999 mg/m³	
WEL TWA (OEL TWA) [2]	400 ppm	
WEL STEL (OEL STEL)	1250 mg/m <sup>3</sup>	
WEL STEL (OEL STEL) [ppm]	500 ppm	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

2-Amino-ethanol (141-43-5)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	2-Aminoethanol		
IOEL TWA	2.5 mg/m³		
IOEL STEL	7.6 mg/m³		
IOEL STEL [ppm]	3 ppm		
Remark	Skin		
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC		
United Kingdom - Occupational Exposure Limits	United Kingdom - Occupational Exposure Limits		
Local name	2-Aminoethanol		
WEL TWA (OEL TWA) [1]	2.5 mg/m <sup>3</sup>		
WEL TWA (OEL TWA) [2]	1 ppm		
WEL STEL (OEL STEL)	7.6 mg/m³		
WEL STEL (OEL STEL) [ppm]	3 ppm		

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# 2-Amino-ethanol (141-43-5) Remark Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)

Monitoring methods	
Monitoring methods	A specific exposure sampling method is not available
Biological monitoring methods	A specific exposure sampling method is not available

EH40/2005 (Fourth edition, 2020). HSE

Propan-2-ol (67-63-0)			
DNEL/DMEL (Workers)			
Long-term - systemic effects, dermal	888 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	500 mg/m <sup>3</sup>		
DNEL/DMEL (General population)			
Long-term - systemic effects,oral	26 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	88 mg/m³		
Long-term - systemic effects, dermal	319 mg/kg bodyweight/day		
PNEC (Water)			
PNEC aqua (freshwater)	140.9 mg/l		
PNEC aqua (marine water)	140.9 mg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	552 mg/kg dwt		
PNEC sediment (marine water)	552 mg/kg dwt		
PNEC (Soil)	PNEC (Soil)		
PNEC soil	28 mg/kg dwt		

2,2'-(ethylenedioxy)diethanol (112-27-6)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	40 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	50 mg/m <sup>3</sup>	
DNEL/DMEL (General population)		
Long-term - systemic effects, inhalation	25 mg/m <sup>3</sup>	
Long-term - systemic effects, dermal	20 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	10 mg/l	
PNEC aqua (marine water)	1 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	46 mg/kg dwt	
PNEC (Soil)		
PNEC soil	3.32 mg/kg dwt	

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PNEC (STP)		
PNEC sewage treatment plant	10 mg/l	
	·	
1,1',1",1"'- ethylenedinitrilo tetra-propan-2-ol (102-60-3)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	4.2 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	29.4 mg/m <sup>3</sup>	
DNEL/DMEL (General population)		
Long-term - systemic effects,oral	2.5 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	8.7 mg/m <sup>3</sup>	
Long-term - systemic effects, dermal	2.5 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0.085 mg/l	
PNEC aqua (marine water)	0.0085 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0.193 mg/kg	
PNEC sediment (marine water)	0.093 mg/kg	
PNEC (Soil)		
PNEC soil	0.0183 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	70 mg/l	

2-Amino-ethanol (141-43-5)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	1 mg/kg bodyweight/day	
Long-term - local effects, inhalation	3.3 mg/m <sup>3</sup>	
DNEL/DMEL (General population)		
Long-term - systemic effects,oral	3.75 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	2 mg/m <sup>3</sup>	
Long-term - systemic effects, dermal	0.24 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0.085 mg/l	
PNEC aqua (marine water)	0.0085 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0.425 mg/kg	
PNEC sediment (marine water)	0.0425 mg/kg	
PNEC (Soil)		
PNEC soil	0.035 mg/kg dwt	

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PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

#### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protective equipment:

Data of item 8 do partly not refer to the use and the regular employing of the product (in this sense consult package leaflet and expert information), but to liberation of major amounts in case of accidents and irregularities.

#### Hand protection:

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions. Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Nitrile rubber	6 (> 480 minutes)	0,35		EN ISO 374
Chemically resistant protective gloves	Natural rubber	6 (> 480 minutes)	0,5		EN ISO 374
Chemically resistant protective gloves	Butyl rubber	6 (> 480 minutes)	0,5		EN ISO 374
Chemically resistant protective gloves	Fluoro-rubber (Viton) - FKM	6 (> 480 minutes)	0,4		EN ISO 374

#### Eye protection:

Eyewash bottle with clean water (EN 15154)

Туре	Field of application	Characteristics	Standard
Protective goggles (EN 166)	Liquid splashes may occur		EN 166

#### Skin and body protection:

Туре	Standard
Long sleeved protective clothing	EN ISO 6530

#### **Respiratory protection:**

Device	Filter type	Condition	Standard
	Type A - High-boiling (>65 °C) organic compounds	In the event of insufficient ventilation:	EN 14387

#### Environmental exposure controls:

Avoid release to the environment.

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#### Other information:

Wash hands before breaks and at the end of workday. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Avoid contact with skin and eyes.

#### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: orange.
Odour	: perfumed.
Odour threshold	: No data available
рН	: > 10 Concentrate
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: ≈ 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: ≈ 23.3 (20°C)
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Density	: 1 – 1.02 g/cm <sup>3</sup> (20°C)
Solubility	: Water: Miscible
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Not oxidising.
Explosive limits	: No data available

#### 9.2. Other information

VOC content Solvent content : < 5 % Directive 2004/42/CE : < 5 %

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

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

Reacts with oxidants.

#### 10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

#### 10.5. Incompatible materials

Oxidizing agent.

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#### 10.6. Hazardous decomposition products

No decomposition when used according to regulations. Thermal decomposition generates : Carbon oxides (CO, CO2). Nitrous fumes. Chlorine compounds.

<u> </u>	
11.1. Information on toxicologic	al effects
Acute toxicity (oral)	: Harmful if swallowed. (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Hexaquart XL	
ATE CLP (oral)	961.4 mg/kg bodyweight

Propan-2-ol (67-63-0)	
LD50 oral rat	5840 mg/kg
LD50 dermal rabbit	13900 mg/kg
LC50 Inhalation - Rat	> 25 mg/l 4 h

1,1',1"',1"'- ethylenedinitrilo tetra-propan-2-ol (102-60-3)	
LD50 oral rat	> 2000 – 5000 mg/kg (OECD 401 method)
LD50 oral	(OECD 402 method)
LD50 dermal rabbit	> 2000 mg/kg

Didecyldimethylammonium chloride (7173-51-5)	
LD50 oral rat	238 mg/kg (OECD 401 method)
LD50 dermal rabbit	3342 mg/kg

1,3-Propanediamine, N-(3-aminopropyl)-N-dodecyl- (2372-82-9)	
LD50 oral rat	261 mg/kg
LD50 dermal rat	> 2000 mg/kg

2-Amino-ethanol (141-43-5)	
LD50 oral rat	1515 mg/kg

(R)-p-mentha-1,8-diene (5989-27-5)	
LD50 oral rat	> 2000 mg/kg
LD50 oral	4400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LD50 dermal	5000 mg/kg
Skin corrosion/irritation	: Causes severe skin burns. pH: > 10 Concentrate
Serious eye damage/irritation	: Causes serious eye damage. pH: > 10 Concentrate
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
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Germ cell mutagenicity Carcinogenicity	<ul> <li>Not classified (Based on available data, the classification criteria are not met)</li> <li>Not classified (Based on available data, the classification criteria are not met)</li> </ul>
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
2 Amine othernal (111 12 E)	
2-Amino-ethanol (141-43-5)	
2-Amino-ethanol (141-43-5) Additional information	Specific concentration limits

Aspiration hazard

: Not classified (Based on available data, the classification criteria are not met)

2.1. Toxicity	
cology - general	: Very toxic to aquatic life. Harmful to aquatic life with long lasting effects
azardous to the aquatic environment, short-term cute)	: Very toxic to aquatic life.
zardous to the aquatic environment, long-term pronic)	: Very toxic to aquatic life with long lasting effects.

Propan-2-ol (67-63-0)	
LC50 fish 1	9640 mg/l Pimephales promelas, 96 h
EC50 Daphnia 1	10000 mg/l Daphnia magna, 48 h
EC50 72h - Algae [1]	1800 mg/l Desmodesmus subspicatus, 72 h

Didecyldimethylammonium chloride (7173-51-5)	
LC50 fish 1	0.19 mg/l Pimephales promelas, 96 h,[ US-EPA]
EC50 Daphnia 1	0.062 mg/l Daphnia magna (Water flea), 48 h, [EPA-FIRA]
ErC50 algae	0.026 mg/l Pseudokirchneriella subcapitata (OECD 201 method)
NOEC chronic fish	0.032 mg/l Brachydanio rerio (zebra-fish) (OECD 210 method) [34 d]
NOEC chronic crustacea	0.014 mg/l Daphnia magna (Water flea) [21 d]

2-Amino-ethanol (141-43-5)	
LC50 fish 1	150 mg/l 96 h, Oncorhynchus mykiss (Rainbow trout)
EC50 Daphnia 1	65 mg/l 48 h, Daphnia magna (Water flea)
EC50 72h - Algae [1]	22 mg/l 72 h, Desmodesmus subspicatus
ErC50 algae	2.5 mg/l

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(R)-p-mentha-1,8-diene (5989-27-5)	
LC50 fish 1	0.7 mg/l 96 h, Pimephales promelas
EC50 Daphnia 1	0.42 mg/l 48 h, Daphnia magna (Water flea)

#### 12.2. Persistence and degradability

Hexaquart XL		
Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.	

Propan-2-ol (67-63-0)		
Persistence and degradability	Readily biodegradable.	
Biodegradation	n 95 % 21 d, (OECD 301E method)	

Didecyldimethylammonium chloride (7173-51-5)	
Persistence and degradability	Readily biodegradable.
Biodegradation	72 % 28 d, (OECD 301B method)

#### 12.3. Bioaccumulative potential

Propan-2-ol (67-63-0)	
Log Pow	0.05

(R)-p-mentha-1,8-diene (5989-27-5)		
Log Pow	4.23	

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

Hexaquart XL	
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	

#### Other adverse effects

: Due to dilution in sewage the concentration will rapidly remain under 0.05% for fungistasis and 0.075% for bacteriostasis. The critical concentration according to Formazan-Test is 0.07.

Additional information

: Avoid release to the environment

SECTION 13: Disposal conside	rations
13.1. Waste treatment methods	
Wasto troatmont mothods	· Can be incidented according to local regulations. Dispass of contents/container in

#### Waste treatment methods

: Can be incinerated according to local regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.

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Sewage disposal recommendations	: The precautionary statement P501 for proper disposal applies to the disinfectant concentrate.
	However, it is still possible and permissible to dispose of usual quantities of the ready-to- use solution via the domestic wastewater into the sewage system.
Product/Packaging disposal recommendations	<ul> <li>Empty containers should be taken for local recycling, recovery or waste disposal.</li> <li>Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of like the product.</li> </ul>
European List of Waste (LoW) code	: 07 06 99 - wastes not otherwise specified

#### **SECTION 14: Transport information**

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number				
UN 1903	UN 1903	UN 1903	UN 1903	UN 1903
14.2. UN proper shippin	g name			
DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl- ; Didecyldimethylammonium chloride)	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl- ; Didecyldimethylammonium chloride)	Disinfectant, liquid, corrosive, n.o.s. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl- ; Didecyldimethylammonium chloride)	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl- ; Didecyldimethylammonium chloride)	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (1,3 Propanediamine, N-(3- aminopropyl)-N-dodecyl- Didecyldimethylammonium chloride)
Transport document descr	iption		I	
UN 1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl- ; Didecyldimethylammonium chloride), 8, II, (E), ENVIRONMENTALLY HAZARDOUS	UN 1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl- ; Didecyldimethylammonium chloride), 8, II, MARINE POLLUTANT/ENVIRONME NTALLY HAZARDOUS	UN 1903 Disinfectant, liquid, corrosive, n.o.s. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl- ; Didecyldimethylammonium chloride), 8, II, ENVIRONMENTALLY HAZARDOUS	UN 1903 DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl- ; Didecyldimethylammonium chloride), 8, II, ENVIRONMENTALLY HAZARDOUS	UN 1903 DISINFECTANT LIQUID, CORROSIVE, N.O.S. (1,3- Propanediamine, N-(3- aminopropyl)-N-dodecyl-; Didecyldimethylammonium chloride), 8, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard o	class(es)			
8	8	8	8	8
	B		B	
14.4. Packing group				
I	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

### Overland transport

Classification code (ADR)

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Special provisions (ADR) Limited quantities (ADR) Excepted quantities (ADR) Packing instructions (ADR) Mixed packing provisions (ADR) Transport category (ADR) Hazard identification number (Kemler No.) Orange plates	: 274 : 11 : E2 : P001, IBC02 : MP15 : 2 : 80 : <b>80</b>
	1903
Tunnel restriction code (ADR) EAC code	: E : 2X
Transport by sea Special provisions (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)	: 274 : 1 L : E2 : P001 : IBC02 : F-A : S-B : B
Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) Special provisions (IATA) ERG code (IATA)	: E2 : Y840 : 0.5L : 851 : 1L : 855 : 30L : A3, A803 : 8L
Inland waterway transport Classification code (ADN) Special provisions (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport	: C9 : 274 : 1 L : E2 : PP, EP : 0
Classification code (RID) Special provisions (RID) Limited quantities (RID) Excepted quantities (RID) Packing instructions (RID) Transport category (RID) Hazard identification number (RID)	: C9 : 274 : 1L : E2 : P001, IBC02 : 2 : 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 substance(s) listed on REACH Annex XVII (Restriction Conditions) Contains no substance(s) listed on the REACH Candidate List Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

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<5%

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): Didecyldimethylammonium chloride (7173-51-5)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

VOC content

: < 5 % Directive 2004/42/CE

Detergent Regulation (648/2004/EC): Labelling of contents:		
(R)-p-mentha-1,8-diene		
Allergenic fragrances > 0.01 %:		

non-ionic	surfactants
	Sunacianto

perfumes

D-LIMONENE

#### Directive 2012/18/EU (SEVESO III)

Seveso III Part I (Categories of dangerous substances) Qualifying quantity (tonnes)		nnes)
	Lower-tier	Upper-tier
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200

#### 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**

Indication of changes:			
Section	Changed item	Change	Comments
13	Waste disposal recommendations	Added	

Abbreviations 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	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	

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IARC	International Agency for Research on Cancer		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
ThOD	Theoretical oxygen demand (ThOD)		
TLM	Median Tolerance Limit		
VOC	Volatile Organic Compounds		
CAS-No.	Chemical Abstract Service number		
N.O.S.	Not Otherwise Specified		
vPvB	Very Persistent and Very Bioaccumulative		
ED	Endocrine disrupting properties		
DOT	Department of Transport		
TDG	Transportation of Dangerous Goods		
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006		
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals		
CAS	CAS (Chemical Abstracts Service) number		
IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk		
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008		
MARPOL 73/78	MARPOL 73/78: International Convention for the Prevention of Pollution From Ships		
ADG	Transport of Australian Dangerous Goods		

Other information

: Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

Full text of H- and EUH-statements:		
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	

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	Asite toxicity (dormal). Cotogon (		
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4		
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		
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3		
Asp. Tox. 1	Aspiration hazard, Category 1		
EUH208	Contains (R)-p-mentha-1,8-diene. May produce an allergic reaction.		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Flam. Liq. 2	Flammable liquids, Category 2		
Flam. Liq. 3	Flammable liquids, Category 3		
H225	Highly flammable liquid and vapour.		
H226	Flammable liquid and vapour.		
H290	May be corrosive to metals.		
H301	Toxic if swallowed.		
H302	Harmful if swallowed.		
H304	May be fatal if swallowed and enters airways.		
H312	Harmful 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.		
H332	Harmful if inhaled.		
H335	May cause respiratory irritation.		
H336	May cause drowsiness or dizziness.		
H373	May cause damage to organs through prolonged or repeated exposure.		
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.		
H412	Harmful to aquatic life with long lasting effects.		
Met. Corr. 1	Corrosive to metals, Category 1		
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A		
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
Skin Sens. 1B	Skin sensitisation, category 1B		
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2		

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Classification and procedure used to derive the classification for mixtures according to GB CLP Regulation			
Met. Corr. 1	H290	On basis of test data	
Acute Tox. 4 (Oral)	H302	Calculation method	
Skin Corr. 1A	H314	Calculation method	
Eye Dam. 1	H318	Calculation method	
Aquatic Acute 1	H400	Calculation method	
Aquatic Chronic 1	H410	Calculation method	

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 therefore not be construed as guaranteeing any specific property of the product.