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

1.1. Product identifier

Product form : Mixture

Product name : HiBiScrub®

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

1.2.1. Relevant identified uses

Main use category : Antimicrobial preparation for pre- and post operative hand disinfection and general antisepsis.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Mölnlycke Health Care
Medlock Street, Oldham
OL1 3HS - United Kingdom
T +44 (0) 161 621 3900 - F +44 (0) 161 621 3988
Antiseptics.UK@molnlycke.com

1.4. Emergency telephone number

Emergency number : +44 (0) 161 621 2121 (9am-5pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Dam. 1 H318

Aquatic Acute 1 H400

Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Xi; R36

N; R50/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS05 GHS09

Signal word (CLP) : Danger

Hazardous ingredients : Chlorhexidine digluconate, Lauryldimethylamine oxide

Hazard statements (CLP) : H318 - Causes serious eye damage
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P273 - Avoid release to the environment
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P391 - Collect spillage
P501 - Dispose of contents/container to Hazardous waste

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Lauryldimethylamine oxide	(CAS No) 1643-20-5 (EC No.) 268-938-5	1-5	Xi; R41 Xi; R38 N; R50
Propan-2-ol	(CAS No) 67-63-0 (EC No.) 200-661-7 (EC index No.) 603-117-00-0	1 - 5	F; R11 Xi; R36 R67
Glycerol	(CAS No) 56-81-5 (EC No.) 200-289-5 (REACH-no) 01-2119471987-18	1 - 5	Not classified
Chlorhexidine digluconate	(CAS No) 18472-51-0 (EC No.) 242-354-0	1 - 5	Xi; R41 N; R50/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lauryldimethylamine oxide	(CAS No) 1643-20-5 (EC No.) 268-938-5	1-5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400
Propan-2-ol	(CAS No) 67-63-0 (EC No.) 200-661-7 (EC index No.) 603-117-00-0	1 - 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Glycerol	(CAS No) 56-81-5 (EC No.) 200-289-5 (REACH-no) 01-2119471987-18	1 - 5	Not classified
Chlorhexidine digluconate	(CAS No) 18472-51-0 (EC No.) 242-354-0	1 - 5	Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R- and H-phrases: 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 to fresh air, keep the patient warm and at rest. If symptoms develop obtain medical attention.

First-aid measures after skin contact : Wash with plenty of soap and water. If symptoms develop obtain medical attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water for 15 minutes. If symptoms develop obtain medical attention.

First-aid measures after ingestion : Rinse mouth. Give 100 - 200 ml of water to drink. Do NOT induce vomiting. Do not give an unconscious person anything to drink. If symptoms develop obtain medical attention.

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

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye damage.

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 : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Nitrogen oxides. Hydrogen fluoride. Ammonia. Hydrogen chloride.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and eye or face protection.

Emergency procedures : Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapours.

6.2. Environmental precautions

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

Methods for cleaning up : Dike to collect large liquid spills. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wash spill area with soapy water.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with eyes. Avoid inhalation of vapours.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this 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 : Strong oxidizing agent. Keep container closed when not in use. Protect material from direct sunlight.

Storage temperature : < 25 °C

7.3. Specific end use(s)

Antimicrobial preparation for pre- and post operative hand disinfection and general antisepsis.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)		
United Kingdom	Local name	Glycerol, mist
United Kingdom	WEL TWA (mg/m³)	10 mg/m³

Propan-2-ol (67-63-0)		
United Kingdom	Local name	Propan-2-ol
United Kingdom	WEL TWA (mg/m³)	999 mg/m³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m³)	1250 mg/m³
United Kingdom	WEL STEL (ppm)	500 ppm

8.2. Exposure controls

Appropriate engineering controls : Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Standard EN 374 - Protective gloves against chemicals.

Eye protection : Chemical goggles or safety glasses. Standard EN 166 - Personal eye-protection.

Skin and body protection : Use chemically protective clothing.

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

Thermal hazard protection : Not required for normal conditions of use.

Environmental exposure controls : Avoid release to the environment.

Other information : Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Viscous.

Colour	:	Yellow. red.
Odour	:	Citrus fruits.
Odour threshold	:	No data available
pH	:	5.2 - 6.2
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive.
Oxidising properties	:	Not oxidising.
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Nitrogen oxides. Ammonia. Hydrogen fluoride. Hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified
Based on available data, the classification criteria are not met

Chlorhexidine digluconate (18472-51-0)	
LD50 oral rat	> 2 g/kg
LD50 dermal rabbit	> 5000 mg/kg

Glycerol (56-81-5)	
LD50 oral rat	12600 mg/kg
LD50 dermal rat	> 21900 mg/kg

Propan-2-ol (67-63-0)	
LD50 oral rat	4396 mg/kg
LD50 dermal rat	12800 mg/kg
LD50 dermal rabbit	12870 mg/kg
LC50 inhalation rat (mg/l)	72.6 mg/l/4h

Lauryldimethylamine oxide (1643-20-5)	
LD50 oral rat	3600 mg/kg

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Causes serious eye damage.
pH: 5.2 - 6.2

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

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

Propan-2-ol (67-63-0)	
	IARC group :
	3

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified.

Chlorhexidine digluconate (18472-51-0)	
LC50 fish	2.08 mg/l 96h Brachydanio rerio
EC50 Daphnia	0.087 mg/l 48h Daphnia magna
NOEC chronic crustacea	0.0206 mg/l 21d Daphnia magna

Glycerol (56-81-5)	
LC50 fish	> 1000 mg/l 96 h
EC50 Daphnia	> 500 mg/l 24 h - Daphnia magna

Propan-2-ol (67-63-0)	
LC50 fish	11130 mg/l 96 h Pimephales promelas
LC50 other aquatic organisms	9640 mg/l static - 96 h Pimephales promelas
EC50 Daphnia	13299 mg/l 48 h Daphnia magna
EC50 Daphnia 2	> 1000 mg/l 72 h Desmodesmus subspicatus
EC50 other aquatic organisms 2	> 1000 mg/l 96 h Desmodesmus subspicatus

12.2. Persistence and degradability

HiBiScrub®	
Persistence and degradability	No information available.

Chlorhexidine digluconate (18472-51-0)	
Biochemical oxygen demand (BOD)	0 mg/l 5 d
Chemical oxygen demand (COD)	219000 mg/l

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

HiBiScrub®	
Ecology - soil	No information available.

12.5. Results of PBT and vPvB assessment

HiBiScrub®
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

: Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 3082
UN-No.(IATA) : 3082
UN-No. (IMDG) : 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR/RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
:
Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorhexidine digluconate(18472-51-0)), 9, III

14.3. Transport hazard class(es)

Class (ADR/RID) : 9
Class (IATA) : 9
Class (IMDG) : 9
Hazard labels (ADR/RID) : 9

Hazard labels (IATA) : 9

Danger labels (IMDG) : 9

14.4. Packing group

Packing group (ADR/RID) : III
Packing group (IATA) : III
Packing group (IMDG) : III

14.5. Environmental hazards

Dangerous for the environment :
Marine pollutant

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : No special precautions required.

14.6.1. Overland transport

Classification code (ADR) : M6
Transport category (ADR) : 3

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

No REACH Annex XVII restrictions
Contains no REACH candidate substance

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

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.

Abbreviations and acronyms : ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route). ATE (Acute Toxicity Estimate). CAS (Chemical Abstracts Service) number. CLP (Classification, Labeling and Packaging). DNEL (Derived No effect Limit). EC (European Community). EC50 (Effective Concentration 50%). EN (European Norm). IARC (International Agency for Research on Cancer). IATA (International Air Transport Association). IBC (Intermediate Bulk Container). IMDG (International Maritime Dangerous Goods Code). IMO (International Maritime Organisation). LC50 (Lethal Concentration 50%). LD50 (Lethal Dose 50%). MAC (Maximal Allowed Concentration). OW (Oil-in-Water (chemistry)). OECD (Organisation for Economic Co-operation and Development). PBT (Persistent, bioaccumulative and toxic). PMcc (Pensky-Martens Closed Cup test). PNEC (predicted no effect concentration). REACH (Registration, Evaluation and Authorisation of CHemicals). RID (Règlement concernant le transport international ferroviaire de marchandises). STEL (Short Term Exposure Limit). TWA (Time Weighted Average). UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods). vPvB (very persistent and very bioaccumulative).

Other information : None.

Full text of R-, H- and EUH-phrases:

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 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
Skin Irrit. 2	Skin corrosion/irritation, Category 2

STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
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.
R11	Highly flammable
R36	Irritating to eyes
R38	Irritating to skin
R41	Risk of serious damage to eyes
R50	Very toxic to aquatic organisms
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant

NCEC SDS EU (REACH ANNEX II)

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