SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006

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

1.1. Product identifier:
STERILUX
UFI: G220-Y02W-200W-PT8K
1.2. Relevant identified uses of the substance or mixture and uses advised against:
Disinfectant for floors, walls, production equipment and all material that resists water, for food processing and fishing industries. Soak smaller equipment in a solution. Apply with low pressure atomizer. Use 1 part of STERILUX to 100 parts of water. Leave for at least 10 minutes.
1.3. Details of the supplier of the safety data sheet:
Kemilux
Mykinesgøta 1 - P.O.Box 1231
FO-110 Tórshavn - Faroe Islands
Phone: +298 350830 - Fax +298 350831
Responsible person for the safety data sheet (e-mail): altox@altox.dk
1.4. Emergency telephone number:
NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): Dial 111
National Poisons Information Centre (Ireland): +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24-hour service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:
Corrosive, harmful and environmentally dangerous liquid.
CLP (1272/2008):
Acute Tox. 4;H302 Skin Corr. 1A;H314 Eye Dam. 1;H318 Aquatic Acute 1:H400 Aquatic Chronic. 2;H411
2.2. Label elements:
Contents: Didecyldimethylammonium chloride

DANGER

H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H410: Very toxic to aquatic life with long lasting effects.
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353+P310: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
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 or doctor/physician.
P501: Dispose of contents/container in accordance with applicable regulations.
2.3. Other hazards: None known.
PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.
Endocrine disrupting properties: The substances are not identified as having endocrine disrupting properties in accordance with the criteria set out in Regulation 2023/707.

SECTION 3: Composition/information on ingredients

3.2. Mixtures:

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH reg.no.	Classification	SCL, M-factor, ATE
5-15	Didecyldimethyl-ammonium chloride (DDAC)	7173-51-5	230-525-3	612-131-00-6	-	Acute Tox. 3;H301 Skin Corr. 1B;H314 Aquatic Acute 1:H400 Aquatic Chronic. 2;H411	ATE oral = 84 mg/kg M (Acute) = 10
< 5	Propan-2-ol	67-63-0	200-661-7	603-117-00-0	01-2119457558-25	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	-

Wording of hazard statements - see section 16.

SECTION 4: First-aid measures

4.1. Description of first aid measures:

Inhalation: Move the affected person to fresh air. **Mild cases:** Keep at rest. If needed: get medical attention. **Severe cases:** Place the person in recovery position and keep warm. If respiration has stopped, administer artificial respiration. Seek medical advice immediately.

Skin contact: Remove contaminated clothing and wash skin with water and mild soap. Seek medical advice; continue to flush on the way.

Eye contact: Immediately flush with water or physiological salt water for at least 15 minutes, holding eye lids open, remember to remove contact lenses, if any. Get medical attention; continue to flush on the way.

Ingestion: Rinse mouth and drink plenty of water. **Do not induce vomiting.** If vomiting occurs keep head down to avoid vomit in the lungs. Seek medical advice immediately.

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

Corrosion of skin, eyes, lungs and gastrointestinal tract. Headache, dizziness, coughing, laboured breathing and indisposition. Inhalation of high concentration may cause risk of water in the lungs (lung oedema), with symptoms (laboured breathing) that might occur several hours after exposure.

Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system (including brain damage).

4.3. Indication of any immediate medical attention and special treatment needed:

In case of unconsciousness: Seek medical advice immediately. Show this safety data sheet to a physician or emergency ward.

SECTION 5: Firefighting measures

5.1. Extinguishing media:

Use water spray, carbon dioxide, dry chemical or foam.

5.2. Special hazards arising from the substance or mixture:

Do not inhale smoke fumes. In case of fire, the substance may form hazardous decomposition products: Primarily oxides of carbon and corrosive hydrogen chloride gas.

5.3. Advice for firefighters:

Wear self-contained breathing apparatus when generation of smoke is vigorous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment - see section 8. Avoid further spreading. Ventilate area of leak or spill.

6.2. Environmental precautions:

Do not empty into drains - see section 12. Inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up:

Absorb spilled liquid with inert material and place in a suitable container for disposal. Flush area of spill with plenty of water. Further handling of spillage - see section 13.

6.4. Reference to other sections:

See references above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Avoid breathing vapours. Provide adequate ventilation. Change contaminated clothes immediately. Wash contaminated skin immediately with water and mild soap. Required access to water and eye wash fountain

7.2. Conditions for safe storage, including any incompatibilities:

Store in tightly closed original container. Keep in a dry and well ventilated place.

Store securely and out of reach of unauthorized personnel and separated from food, feed, drugs etc.

7.3. Specific end use(s):

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters:

Occupational exposure limits, UK (EH40/ed.2020):

Substance	8-hour TWA	15-min STEL	Comments
Propan-2-ol	400 ppm = 999 mg/m^3	500 ppm = 1250 mg/m^3	-

Occupational exposure limit values, Ireland (2021):

Substance	8-hour TWA	15-min STEL	Comments
Propan-2-ol	200 ppm	400 ppm	Sk

Sk: Substances can be absorbed through the skin.

DNEL/PNEC: No CSR.

SECTION 8: Exposure controls/Personal protection (continued)

8.2. Exposure controls:

Appropriate engineering controls: Ensure adequate ventilation.

Personal protective equipment:

Inhalation: In case of inadequate ventilation: Use an approved mask with gas/particle filter type A/P2 (EN140). The filter has a limited lifetime and must be changed. Read the instruction.

Skin: Wear protective gloves of e.g. nitrile rubber (>0.3 mm) (EN374). It has not been possible to find data for breakthrough time. In case of spill on the glove it is recommended to change it after use.

Eyes: Wear tight fitting safety goggles (EN ISO 16321-1).

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Physical state:	Clear liquid
Colour:	Slightly yellow
Odour:	Alcohol
Melting point/freezing point (°C):	Not determined
Boiling point or initial boiling point and boiling range (°C):	Not determined
Flammability (solid, gas):	Not relevant (liquid)
Lower and upper explosion limit (vol-%):	Not determined
Flash point (°C):	> 63
Auto-ignition temperature (°C):	Not determined
Decomposition temperature (°C):	Not determined
pH:	6-8 (concentrate)
Kinematic viscosity:	Not determined
Solubility:	Completely soluble in water
Partition coefficient n-octanol/water (log value):	Not determined
Vapour pressure:	Not determined
Density and/or relative density (g/ml):	0.98
Relative vapour density:	Not determined
Particle characteristics:	Not relevant
9.2. Other information:	None relevant

SECTION 10: Stability and reactivity

10.1. Reactivity:

No available data

10.2. Chemical stability:

Stable under normal conditions - see section 7.

10.3. Possibility of hazardous reactions:

None known.

10.4. Conditions to avoid:

Excessive heating.

10.5. Incompatible materials:

The mixture contains a chlorine compound, which may erode stainless steel and similar materials.

10.6. Hazardous decomposition products:

When heated to high temperatures (decomposition) toxic gasses are formed such as oxides of carbon and corrosive hydrogen chloride gas.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Acute toxicity:	Acute Tox. 4;H302 - Harmful if swallowed.
Skin corrosion/irritation:	Skin Corr. 1A;H314 - Causes severe skin burns and eye damage.
Serious eye damage/irritation:	Eye Dam. 1;H318 - Causes serious eye damage.
Respiratory or skin sensitization:	Based on available data, the classification criteria are not met.
Germ cell mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity:	Based on available data, the classification criteria are not met.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

SECTION 11: Toxicological information (continued)

Hazard class	Data Didecyldimethylammonium chloride	Test	Data source
Acute toxicity:			
Inhalation	No available data	-	-
Dermal	No available data	-	-
Oral	LD_{50} (rat) = 84 mg/kg	No info.	RTECS
Corrosion/irritation:	Severe irritation/corrosion, skin, rabbit	Draize	RTECS
Sensitization:	No available data	-	-
CMR:	No available data on carcinogenicity or mutagenicity TD_{Lo} (oral, rat) = 5250 mg/kg: "Paternal/maternal effect" and "Effects on newborn"	- Multigeneration	- -

Information on likely routes of exposure: Inhalation, skin and ingestion.

Symptoms:

Inhalation: Corrosion of the respiratory tract. Headache, dizziness, coughing, laboured breathing and indisposition. High concentration may cause risk of water in the lungs (lung oedema). Be aware that symptoms (laboured breathing) may occur several hours after exposure.

Skin: Corrosion with redness and pain. Didecyldimethylammonium chloride may be absorbed through skin and, at high concentration, cause symptoms as described under "Ingestion".

Eyes: Corrosion with redness, pain and blurred vision and possible permanent eye damage.

Ingestion: Corrosion of the gastrointestinal tract with nausea, stomach ache, vomiting and diarrhoea.

Chronic effects: Long term or repeated skin contact with splashes and vapours may degrease the skin and cause red, dry, cracked and thickened skin. Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system (including brain damage).

11.2. Information on other hazards:

None known.

SECTION 12: Ecological information

12.1. Toxicity:

Didecyldimethylammonium chloride is very toxic in the aquatic environment.

Aquatic	Data (100% Didecyldimethylammonium chloride)	Test (Media)	Data source
Fish	LC_{50} (Danio rerio- 96h) = 0,49 mg/l	OECD 203	ECHA
Crustaceans	EC_{50} (Daphnia magna - 48h) = 0.057 mg/l	OECD 202	ECHA
Algae	EC_{50} (Pseudokirchnerella sub. 72h) = 0.156 mg/kg	OECD 201	ECHA

12.2. Persistence and degradability:

Didecyldimethylammonium chloride is readily biodegradable (>60%, BOD, 28 d. OECD 301D).

12.3. Bioaccumulative potential:

Didecyldimethylammonium chloride: $3< \text{Log } K_{ow} <5$ – significant bioaccumulative effect.

12.4. Mobility in soil:

Didecyldimethylammonium chloride: Log $K_{oc} \leq 1$ – very large mobility in soil.

12.5. Results of PBT and vPvB assessment:

No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

12.6. Endocrine disrupting properties:

None known.

12.7. Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

The mixture is to be considered as hazardous waste. Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code:

20 01 29 (mixture itself) and 15 02 02 (Inert material contaminated with the mixture)

SECTION 14: Transport information

14.1. UN number or ID number: 1903

14.2. UN proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Didecyldimethylammonium chloride)

14.3. Transport hazard class(es): 8

14.4. Packing group: III (ADR/RID, IMDG) **EMS:** F-A, S-B **Stowage note:** Category A

14.5. Environmental hazards: Yes

14.6. Special precautions for user: None.

14.7. Maritime transport in bulk according to IMO instruments: Not relevant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
Must not be used by persons under 18 years of age.
The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC).
Other labelling: according to 648/2004:
5-15% Cationic surfactants
Other labelling information (Regulation (EU) No 528/2012):
Biocide product type: PT 4, Food and feed area.
Active substance: Didecyldimethylammonium chloride 5-15%. Approval ID: 0067-04
15.2. Chemical safety assessment:
No CSR.

SECTION 16: Other information

Hazard statements mentioned in section 2 and 3:
H225: Highly flammable liquid and vapour.
H301: Toxic if swallowed.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
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.
Abbreviations:
ATE = Acute Toxicity Estimates
CMR = Carcinogenicity, mutagenicity and reproductive toxicity.
CSR = Chemical Safety Report
DNEL = Derived No-Effect Level
EC_{50} = Effect Concentration 50 %
FW = Fresh Water
LC_{50} = Lethal Concentration 50 %
LD_{50} = Lethal Dose 50 %
PBT = Persistent, Bioaccumulative, Toxic
PNEC = Predicted No-Effect Concentration
SCL = Specific Concentration limits
vPvB = very Persistent, very Bioaccumulative
Literature:
ECHA = European Chemicals Agency
EPA Ecotox = The US Environmental Protection Agency's database on ecotoxicological effects for chemicals.
IUCLID = International Uniform ChemicaL Information Database.
RTECS = Register of Toxic Effects of Chemical Substances.
Training advice:
No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.
Changes since the previous edition:
Revision of the format according to Regulation 2020/878.

Prepared by: Altox a/s – Tonsbakken 16-18 - 2740 Skovlunde - Phone +45 - 38 34 77 98 / KB - Quality control: PW