Sterisept Plus

Date of compilation: 02.01.2023 Version: 1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: Sterisept Plus

Other means of identification:

UFI: 8A4X-4K3M-H00T-PX46

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

Relevant uses: Disinfectant. For professional user/industrial user only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

AS Chemi-Pharm
Tänassilma tee 11, Tänassilma küla, Saku vald,
Harju maakond – Estonia, 76406
Phone.: +3726778806
chemi-pharm@chemi-pharm.com
www.chemi-pharm.com

1.4 Emergency telephone number: 112

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411
Eye Dam. 1: Serious eye damage, Category 1, H318
Skin Corr. 1: Skin corrosion, Category 1, H314
STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2 (Oral), H373
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger

Hazard statements:

Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Skin Corr. 1: H314 - Causes severe skin burns and eye damage.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).
STOT SE 3: H335 - May cause respiratory irritation.

Precautionary statements:

P260: Do not breathe vapours.
P273: Avoid release to the environment.
P280: Wear protective gloves/face protection/protective clothing/protective footwear.
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 or shower.
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.
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Solution

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 7173-51-5 EC: 230-525-2 Index: 612-131-00-6 REACH: 01-2119945987-15-XXXX	**Didecyldimethylammonium chloride(1)**	Self-classified	**10 - <25 %**
	Regulation 1272/2008	Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Corr. 1B: H314 - Danger	
CAS: 2372-82-9 EC: 219-145-8 Index: Non-applicable REACH: 01-2119980592-29-XXXX	**N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine(1)**	Self-classified	**10 - <25 %**
	Regulation 1272/2008	Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1B: H314; STOT RE 2: H373 - Danger	
CAS: 141-43-5 EC: 205-483-3 Index: 603-030-00-8 REACH: 01-2119486455-28-XXXX	**2-aminoethanol(1)**	ATP CLP00	**10 - <25 %**
	Regulation 1272/2008	Acute Tox. 4: H302+H312+H332; Skin Corr. 1B: H314 - Danger	
CAS: 78330-20-8 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	**Alcohols, C9-11-iso-, C10-rich, ethoxylated(1)**	Self-classified	**2,5 - <10 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	

(1) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	M-factor	
Didecyldimethylammonium chloride	Acute	10
CAS: 7173-51-5 EC: 230-525-2	Chronic	1

Identification	Specific concentration limit
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	% (w/w) >=5: STOT SE 3 - H335

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

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SECTION 4: FIRST AID MEASURES (continued)

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

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SECTION 7: HANDLING AND STORAGE (continued)

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 ºC

Maximum Temp.: 30 ºC

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC,Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
2-aminoethanol	IOELV (8h)	1 ppm	2,5 mg/m³
CAS: 141-43-5 EC: 205-483-3	IOELV (STEL)	3 ppm	7,6 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 2372-82-9	Dermal	Non-applicable	Non-applicable	8,96 mg/kg	Non-applicable
EC: 219-145-8	Inhalation	Non-applicable	Non-applicable	0,789 mg/m³	Non-applicable
2-aminoethanol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 141-43-5	Dermal	Non-applicable	Non-applicable	3 mg/kg	Non-applicable
EC: 205-483-3	Inhalation	Non-applicable	Non-applicable	1 mg/m³	0,51 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Oral	Non-applicable	Non-applicable	0,04 mg/kg	Non-applicable
CAS: 2372-82-9	Dermal	Non-applicable	Non-applicable	3,2 mg/kg	Non-applicable
EC: 219-145-8	Inhalation	Non-applicable	Non-applicable	0,118 mg/m³	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-aminoethanol	Oral	Non-applicable	Non-applicable	1,5 mg/kg	Non-applicable
CAS: 141-43-5	Dermal	Non-applicable	Non-applicable	1,5 mg/kg	Non-applicable
EC: 205-483-3	Inhalation	Non-applicable	Non-applicable	0,18 mg/m³	0,28 mg/m³

PNEC:

Identification				
Didecyldimethylammonium chloride	STP	0,14 mg/L	Fresh water	0,0011 mg/L
CAS: 7173-51-5	Soil	1,4 mg/kg	Marine water	0,00011 mg/L
EC: 230-525-2	Intermittent	0,00021 mg/L	Sediment (Fresh water)	61,86 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	6,186 mg/kg
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	STP	0,18 mg/L	Fresh water	0,001 mg/L
CAS: 2372-82-9	Soil	45,34 mg/kg	Marine water	0 mg/L
EC: 219-145-8	Intermittent	0 mg/L	Sediment (Fresh water)	3,2 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,13 mg/kg
2-aminoethanol	STP	100 mg/L	Fresh water	0,07 mg/L
CAS: 141-43-5	Soil	1,29 mg/kg	Marine water	0,007 mg/L
EC: 205-483-3	Intermittent	0,028 mg/L	Sediment (Fresh water)	0,357 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,036 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves	CE CAT III	EN ISO 374-1:2016+A1:2018 EN 16523-1:2015+A1:2018 EN ISO 21420:2020	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield	CE CAT II	EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks	CE CAT III	EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994	For professional use only. Clean periodically according to the manufacturer´s instructions.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory foot protection	Safety footwear for protection against chemical risk	CE CAT III	EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	14,03 % weight
V.O.C. density at 20 ºC:	Non-applicable
Average carbon number:	2
Average molecular weight:	59,78 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	121 ºC
Vapour pressure at 20 ºC:	2221 Pa
Vapour pressure at 50 ºC:	11672,63 Pa (11,67 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	Non-applicable *
Relative density at 20 ºC:	0,99 - 1
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	12 - 13
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Flammability:	
Flash Point:	102 ºC
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	423 ºC
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Particle characteristics:	
Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
Other safety characteristics:	
Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Not applicable

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Non-applicable
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Didecyldimethylammonium chloride	LD50 oral	238 mg/kg	Rat
CAS: 7173-51-5	LD50 dermal	3342 mg/kg	Rabbit
EC: 230-525-2	LC50 inhalation	Non-applicable	
2-aminoethanol	LD50 oral	>5000 mg/kg	Rat
CAS: 141-43-5	LD50 dermal	1025 mg/kg	Rabbit
EC: 205-483-3	LC50 inhalation	11 mg/L (4 h)	Rat

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD50 oral	261 mg/kg	Rat
CAS: 2372-82-9	LD50 dermal	Non-applicable	
EC: 219-145-8	LC50 inhalation	Non-applicable	
Alcohols, C9-11-iso-, C10-rich, ethoxylated	LD50 oral	500 mg/kg	
CAS: 78330-20-8	LD50 dermal	Non-applicable	
EC: Non-applicable	LC50 inhalation	Non-applicable	

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

Other information

Non-applicable

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Didecyldimethylammonium chloride	LC50	0,032 mg/L (96 h)	Pimephales promelas	Fish
CAS: 7173-51-5	EC50	0,062 mg/L (48 h)	Daphnia magna	Crustacean
EC: 230-525-2	EC50	0,026 mg/L (96 h)	Pseudokirchneriella subcapitata	Algae
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LC50	>0.1 - 1 (96 h)		Fish
CAS: 2372-82-9	EC50	>0.1 - 1 (48 h)		Crustacean
EC: 219-145-8	EC50	>0.1 - 1 (72 h)		Algae
2-aminoethanol	LC50	349 mg/L (96 h)	Cyprinus carpio	Fish
CAS: 141-43-5	EC50	65 mg/L (48 h)	Daphnia magna	Crustacean
EC: 205-483-3	EC50	22 mg/L (72 h)	Scenedesmus subspicatus	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Didecyldimethylammonium chloride	NOEC	Non-applicable		
CAS: 7173-51-5 EC: 230-525-2	NOEC	0,021 mg/L	Daphnia magna	Crustacean
2-aminoethanol	NOEC	1,24 mg/L	Oryzias latipes	Fish
CAS: 141-43-5 EC: 205-483-3	NOEC	0,85 mg/L	Daphnia magna	Crustacean

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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Didecyldimethylammonium chloride	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 7173-51-5	COD	Non-applicable	Period	28 days
EC: 230-525-2	BOD5/COD	Non-applicable	% Biodegradable	0 %
2-aminoethanol	BOD5	Non-applicable	Concentration	20 mg/L
CAS: 141-43-5	COD	Non-applicable	Period	21 days
EC: 205-483-3	BOD5/COD	Non-applicable	% Biodegradable	90 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Didecyldimethylammonium chloride	BCF	71
CAS: 7173-51-5	Pow Log	2.59
EC: 230-525-2	Potential	Moderate
2-aminoethanol	BCF	3
CAS: 141-43-5	Pow Log	-1.31
EC: 205-483-3	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-aminoethanol	Koc	0.27	Henry	3,7E-5 Pa·m³/mol
CAS: 141-43-5	Conclusion	Very High	Dry soil	No
EC: 205-483-3	Surface tension	5,025E-2 N/m (25 ºC)	Moist soil	No

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP8 Corrosive, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:

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SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number or ID number:**	UN1903
14.2	**UN proper shipping name:**	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Didecyldimethylammonium chloride)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	274
	Tunnel restriction code:	E
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:

14.1	**UN number or ID number:**	UN1903
14.2	**UN proper shipping name:**	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Didecyldimethylammonium chloride)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Marine pollutant:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	274
	EmS Codes:	F-A, S-B
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
	Segregation group:	SGG18
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2022:

14.1	**UN number or ID number:**	UN1903
14.2	**UN proper shipping name:**	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Didecyldimethylammonium chloride)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine.

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

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SECTION 15: REGULATORY INFORMATION (continued)

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Didecyldimethylammonium chloride (Product-type 1, 2, 3, 4, 8, 10, 11, 12) ; N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (Product-type 2, 3, 4, 6, 8, 11, 12, 13)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Contains Didecyldimethylammonium chloride

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
E2	ENVIRONMENTAL HAZARDS	200	500

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H302: Harmful if swallowed.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.
H411: Toxic to aquatic life with long lasting effects.
H373: May cause damage to organs through prolonged or repeated exposure (Oral).
H314: Causes severe skin burns and eye damage.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 3: H301 - Toxic if swallowed.
Acute Tox. 4: H302 - Harmful if swallowed.
Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

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SECTION 16: OTHER INFORMATION (continued)

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

- END OF SAFETY DATA SHEET -