



## Quatrodes Unit NF

Date of compilation: 24/10/2016


Revised: 13/04/2021

Version: 7 (Replaced 6)

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

- 1.1 Product identifier:** Quatrodes Unit NF
- Other means of identification:**  
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Disinfectant cleaner. For professional users 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:**  
MEDISEPT Sp. z o.o.  
ul. Ludwika Spiessa 4  
20-270 Lublin - lubelskie - Polska  
Phone: +48 81 535 22 76  
p.brewczak@medisept.pl  
<https://medisept.pl/>
- 1.4 Emergency telephone number:** +48 81 535 22 92 at time: 8.00 a.m. – 4.00. p.m.  
112 (general emergency number)

## 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.  
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
- 2.2 Label elements:**
- CLP Regulation (EC) No 1272/2008:**  
Danger
- 
- Hazard statements:**  
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.  
Skin Corr. 1: H314 - Causes severe skin burns and eye damage.
- Precautionary statements:**  
P280: Wear protective gloves/face protection/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 or 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/doctor.  
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.
- Substances that contribute to the classification**  
Dimethyldioctylammonium chloride; Alanine, N,N-bis(carboxymethyl-), trisodiumsalt; potassium hydroxide
- 2.3 Other hazards:**  
Product fails to meet PBT/vPvB criteria  
Endocrine-disrupting properties: The product fails to meet the criteria.

\*\* Changes with regards to the previous version

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**



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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Non-applicable

## 3.2 Mixture:

**Chemical description:** Mixture based on cationic and non-ionic surfactants**Components:**

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

Identification	Chemical name/Classification		Concentration
CAS: 34590-94-8 EC: 252-104-2 Index: Non-applicable REACH: 01-2119450011-60-XXXX	Dipropylene Glycol Methyl Ether <sup>1</sup>	Not classified	2.5 - <10 %
	Regulation 1272/2008		
CAS: 7320-34-5 EC: 230-785-7 Index: Non-applicable REACH: 01-2119489369-18-XXXX	Tetrapotassium pyrophosphate <sup>2</sup>	Self-classified	2.5 - <10 %
	Regulation 1272/2008	Eye Irrit. 2: H319 - Warning	
CAS: 5538-94-3 EC: 226-901-0 Index: Non-applicable REACH: 01-2120767055-53-XXXX	Dimethyldioctylammonium chloride <sup>2</sup>	Self-classified	2.5 - <10 %
	Regulation 1272/2008	Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1B: H314 - Danger	
CAS: 64-17-5 EC: 200-578-6 Index: 603-002-00-5 REACH: 01-2119457610-43-XXXX	ethanol <sup>2</sup>	Self-classified	1 - <2.5 %
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger	
CAS: 1310-58-3 EC: 215-181-3 Index: 019-002-00-8 REACH: 01-2119487136-33-XXXX	potassium hydroxide <sup>2</sup>	ATP CLP00	1 - <2.5 %
	Regulation 1272/2008	Acute Tox. 4: H302; Skin Corr. 1A: H314 - Danger	
CAS: 85409-22-9 EC: 287-089-1 Index: Non-applicable REACH: Non-applicable	Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides <sup>2</sup>	Self-classified	<1 %
	Regulation 1272/2008	Acute Tox. 4: H302; Aquatic Acute 1: H400; Skin Corr. 1B: H314 - Danger	

<sup>1</sup> Substance with a Union workplace exposure limit<sup>2</sup> 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	Specific concentration limit
ethanol CAS: 64-17-5 EC: 200-578-6	% (w/w) >=50: Eye Irrit. 2 - H319
potassium hydroxide CAS: 1310-58-3 EC: 215-181-3	% (w/w) >=5: Skin Corr. 1A - H314 2<= % (w/w) <5: Skin Corr. 1B - H314 0.5<= % (w/w) <2: Skin Irrit. 2 - H315 % (w/w) >=2: Eye Dam. 1 - H318 0.5<= % (w/w) <2: Eye Irrit. 2 - H319

## SECTION 4: FIRST AID MEASURES

## 4.1 Description of first aid measures:

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

**By inhalation:**

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

**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:**

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**SECTION 4: FIRST AID MEASURES (continued)**

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:**

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, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

**Unsuitable extinguishing media:**

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

**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. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**For emergency responders:**

Wear protective equipment. Keep unprotected persons away. 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.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)**

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for 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 °C
- Maximum Temp.: 25 °C
- Maximum time: 24 Months

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		
	IOELV (8h)	50 ppm	308 mg/m <sup>3</sup>
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	IOELV (STEL)		

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	283 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	308 mg/m <sup>3</sup>	Non-applicable
Tetrapotassium pyrophosphate CAS: 7320-34-5 EC: 230-785-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	17,63 mg/m <sup>3</sup>	Non-applicable
Dimethyldioctylammonium chloride CAS: 5538-94-3 EC: 226-901-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2,67 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	18,79 mg/m <sup>3</sup>	Non-applicable

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
ethanol CAS: 64-17-5 EC: 200-578-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	343 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	950 mg/m <sup>3</sup>	Non-applicable
potassium hydroxide CAS: 1310-58-3 EC: 215-181-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m <sup>3</sup>

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	Oral	Non-applicable	Non-applicable	36 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	121 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	37,2 mg/m <sup>3</sup>	Non-applicable
Tetrapotassium pyrophosphate CAS: 7320-34-5 EC: 230-785-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4,35 mg/m <sup>3</sup>	Non-applicable
Dimethyldioctylammonium chloride CAS: 5538-94-3 EC: 226-901-0	Oral	1,6 mg/kg	Non-applicable	1,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	7,36 mg/m <sup>3</sup>	Non-applicable
ethanol CAS: 64-17-5 EC: 200-578-6	Oral	Non-applicable	Non-applicable	87 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	206 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	114 mg/m <sup>3</sup>	Non-applicable
potassium hydroxide CAS: 1310-58-3 EC: 215-181-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m <sup>3</sup>

**PNEC:**

Identification				
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	STP	4168 mg/L	Fresh water	19 mg/L
	Soil	2,74 mg/kg	Marine water	1,9 mg/L
	Intermittent	190 mg/L	Sediment (Fresh water)	70,2 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	7,02 mg/kg
Dimethyldioctylammonium chloride CAS: 5538-94-3 EC: 226-901-0	STP	0,5 mg/L	Fresh water	0,001 mg/L
	Soil	Non-applicable	Marine water	0,0001 mg/L
	Intermittent	0,00066 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
ethanol CAS: 64-17-5 EC: 200-578-6	STP	580 mg/L	Fresh water	0,96 mg/L
	Soil	0,63 mg/kg	Marine water	0,79 mg/L
	Intermittent	2,75 mg/L	Sediment (Fresh water)	3,6 mg/kg
	Oral	0,38 g/kg	Sediment (Marine water)	2,9 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**





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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**


Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves		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		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
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.

**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):	7,32 % weight
V.O.C. density at 20 °C:	75,69 kg/m <sup>3</sup> (75,69 g/L)
Average carbon number:	6,1
Average molecular weight:	129,79 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 °C:	Liquid
Appearance:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Non-applicable *

**Volatility:**

Boiling point at atmospheric pressure:	103 °C
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\*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)

Vapour pressure at 20 °C:	2356 Pa
Vapour pressure at 50 °C:	12390,72 Pa (12,39 kPa)
Evaporation rate at 20 °C:	Non-applicable *
<b>Product description:</b>	
Density at 20 °C:	1029 - 1039 kg/m <sup>3</sup>
Relative density at 20 °C:	1,06
Dynamic viscosity at 20 °C:	1,15 cP
Kinematic viscosity at 20 °C:	1,09 mm <sup>2</sup> /s
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	12,5 - 14
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Completely miscible
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
<b>Flammability:</b>	
Flash Point:	75 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	270 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
<b>Particle characteristics:</b>	
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 °C:	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.

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**SECTION 10: STABILITY AND REACTIVITY (continued)**

**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	Precaution	Precaution	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<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

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

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

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health.

**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 : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- 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, as it does not contain 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: ethanol (1)
- 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:

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.

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





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## SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Specific target organ toxicity (STOT)-repeated exposure: 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.
- 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
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal	9510 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Tetrapotassium pyrophosphate CAS: 7320-34-5 EC: 230-785-7	LD50 oral	Non-applicable	
	LD50 dermal	4640 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
ethanol CAS: 64-17-5 EC: 200-578-6	LD50 oral	6200 mg/kg	Rat
	LD50 dermal	20000 mg/kg	Rabbit
	LC50 inhalation	124,7 mg/L (4 h)	Rat
Dimethyldioctylammonium chloride CAS: 5538-94-3 EC: 226-901-0	LD50 oral	500 mg/kg (ATEi)	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
potassium hydroxide CAS: 1310-58-3 EC: 215-181-3	LD50 oral	388 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides CAS: 85409-22-9 EC: 287-089-1	LD50 oral	500 mg/kg	Rat
	LD50 dermal	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

Contains phosphates. Excessive discharge may cause eutrophication.

**12.1 Toxicity:****Acute toxicity:**

Identification	Concentration		Species	Genus
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	LC50	10000 mg/L (96 h)	Pimephales promelas	Fish
	EC50	1919 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Dimethyldioctylammonium chloride CAS: 5538-94-3 EC: 226-901-0	LC50	>0.1 - 1 mg/L (96 h)		Fish
	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae



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## SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
ethanol CAS: 64-17-5 EC: 200-578-6	LC50	11000 mg/L (96 h)	Alburnus alburnus	Fish
	EC50	9268 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1450 mg/L (192 h)	Microcystis aeruginosa	Algae
potassium hydroxide CAS: 1310-58-3 EC: 215-181-3	LC50	80 mg/L (48 h)	Gambusia affinis	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides CAS: 85409-22-9 EC: 287-089-1	LC50	Non-applicable		
	EC50	0,016 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

**Chronic toxicity:**

Identification	Concentration		Species	Genus
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	NOEC	Non-applicable		
	NOEC	0,5 mg/L	Daphnia magna	Crustacean
ethanol CAS: 64-17-5 EC: 200-578-6	NOEC	250 mg/L	Danio rerio	Fish
	NOEC	2 mg/L	Ceriodaphnia dubia	Crustacean

**12.2 Persistence and degradability:****Substance-specific information:**

Identification	Degradability		Biodegradability	
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	BOD5	Non-applicable	Concentration	Non-applicable
	COD	0 g O2/g	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	73 %
ethanol CAS: 64-17-5 EC: 200-578-6	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	89 %

**12.3 Bioaccumulative potential:****Substance-specific information:**

Identification	Bioaccumulation potential	
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	BCF	1
	Pow Log	-0.06
	Potential	Low
ethanol CAS: 64-17-5 EC: 200-578-6	BCF	3
	Pow Log	-0.31
	Potential	Low

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
ethanol CAS: 64-17-5 EC: 200-578-6	Koc	1	Henry	4,61E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,339E-2 N/m (25 °C)	Moist soil	Yes

**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:**

- CONTINUED ON NEXT PAGE -



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**SECTION 13: DISPOSAL CONSIDERATIONS (continued)**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
20 01 29*	detergents containing hazardous substances	Dangerous

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

HP8 Corrosive, HP14 Ecotoxic

**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:



- 14.1 **UN number or ID number:** UN1903
- 14.2 **UN proper shipping name:** DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Dimethyldioctylammonium 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. (Dimethyldioctylammonium 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 2023:



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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. (Dimethyldioctylammonium 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:**

Composition of the active ingredients (Regulation (EU) No 528/2012): ethanol (1.32%); Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides (0.84%)

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

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: ethanol (Product-type 1, 2, 4) ; Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides (Product-type 1, 2, 3, 4, 10, 11, 12, 22)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Regulation (EC) No 648/2004 on detergents:**

In accordance with this regulation the product complies with the following:

The tensoactives contained in this mixture comply with the biodegradability criteria stipulated in Regulation (EC) n°648/2004 on detergents. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

**Labelling for contents:**

Component	Concentration interval
Phosphates	5 <= % (w/w) < 15
Disinfectants	

**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**



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**SECTION 16: OTHER INFORMATION (continued)****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.:**

Substances that contribute to the classification (SECTION 2):

- New declared substances  
Alanine, N,N-bis(carboxymethyl-), trisodiumsalt (164462-16-2)

**Texts of the legislative phrases mentioned in section 2:**

H318: Causes serious eye damage.  
H314: Causes severe skin burns and eye damage.  
H411: Toxic to aquatic life with long lasting effects.

**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. 4: H302 - Harmful if swallowed.  
Aquatic Acute 1: H400 - Very toxic to aquatic life.  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.  
Eye Irrit. 2: H319 - Causes serious eye irritation.  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.  
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.  
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

**Classification procedure:**

Eye Dam. 1: Calculation method  
Skin Corr. 1: Calculation method  
Aquatic Chronic 2: Calculation method

**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.

**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

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -