


**Quatrodes Unit NF**

Date of compilation: 24/10/2016 Revised: 09/06/2019 Version: 3 (Replaced 2)

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

- 1.1 Product identifier:** Quatrodes Unit NF
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Disinfectant . For professional 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:**
MEDISEPT Sp. z o.o.
Konopnica 159c
21-030 Motycz - lubelskie - Polska
Phone.: +48 81 535 22 92
g.gromadzki@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.
Eye Dam. 1: Serious eye damage, Category 1, H318
Skin Corr. 1B: Skin corrosion, Category 1B, H314
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Danger

Hazard statements:
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage
Precautionary statements:
P280: Wear protective gloves/protective clothing/eye protection/face protection
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
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

** Changes with regards to the previous version

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**
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:



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification	Concentration
CAS: 34590-94-8 EC: 252-104-2 Index: Non-applicable REACH:01-2119450011-60-XXXX	Dipropylene Glycol Methyl Ether¹ Regulation 1272/2008	Not classified 2,5 - <10 %
CAS: 7320-34-5 EC: 230-785-7 Index: Non-applicable REACH:01-2119489369-18-XXXX	Tetrapotassium pyrophosphate² Regulation 1272/2008	Self-classified Eye Irrit. 2: H319 - Warning 2,5 - <10 %
CAS: 5538-94-3 EC: 226-901-0 Index: Non-applicable REACH:01-2120767055-53-XXXX	Dimethyldioctylammonium chloride² Regulation 1272/2008	Self-classified Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1B: H314 - Danger 2,5 - <10 %
CAS: 64-17-5 EC: 200-578-6 Index: 603-002-00-5 REACH:01-2119457610-43-XXXX	Ethanol² Regulation 1272/2008	Self-classified Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger 1 - <2,5 %
CAS: 1310-58-3 EC: 215-181-3 Index: 019-002-00-8 REACH:01-2119487136-33-XXXX	Potassium hydroxide² Regulation 1272/2008	ATP CLP00 Acute Tox. 4: H302; Skin Corr. 1A: H314 - Danger 1 - <2,5 %
CAS: 85409-22-9 EC: 287-089-1 Index: Non-applicable REACH:Non-applicable	Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides² Regulation 1272/2008	Self-classified Acute Tox. 4: H302; Aquatic Acute 1: H400; Skin Corr. 1B: H314 - Danger <1 %

¹ Substance with a Union workplace exposure limit² Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.

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:

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

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SECTION 5: FIREFIGHTING MEASURES (continued)**5.1 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. IT IS NOT RECOMMENDED 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:**

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. Destroy 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.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

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**7.1 Precautions for safe handling:****A.- Precautions for safe manipulation**

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

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. Avoid splashes and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

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

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:**A.- Technical measures for storage**



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SECTION 7: HANDLING AND STORAGE (continued)

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

Identification	Environmental limits		
	Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	IOELV (8h)	50 ppm
	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	65 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	310 mg/m ³	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	44,08 mg/m ³	Non-applicable
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	1900 mg/m ³	950 mg/m ³	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 ³

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	1,67 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	37,2 mg/m ³	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	10,87 mg/m ³	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	950 mg/m ³	114 mg/m ³	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 ³

PNEC:



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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
Tetrapotassium pyrophosphate CAS: 7320-34-5 EC: 230-785-7	STP	50 mg/L	Fresh water	0,05 mg/L
	Soil	Non-applicable	Marine water	0,005 mg/L
	Intermittent	0,5 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	Non-applicable	Marine water	0,79 mg/L
	Intermittent	2,75 mg/L	Sediment (Fresh water)	3,6 mg/kg
	Oral	720 g/kg	Sediment (Marine water)	Non-applicable

8.2 Exposure controls:

A.- General security and hygiene measures in the work place



As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. 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		EN ISO 374-1:2016 EN 16523-1:2015 EN 420:2003+A1:2009	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 predicted in advance with total reliability and has therefore to be checked prior to the application"



D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield		EN 166:2001 EN 167:2001 EN 168:2001 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:



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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 ³ (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
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 *

Product description:

Density at 20 °C:	1029 - 1039 kg/m ³
Relative density at 20 °C:	1,06
Dynamic viscosity at 20 °C:	1,15 cP
Kinematic viscosity at 20 °C:	1,09 cSt
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 *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	270 °C
Lower flammability limit:	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)

Upper flammability limit: Non-applicable *

Explosive:

Lower explosive limit: Non-applicable *

Upper explosive limit: Non-applicable *

9.2 Other information:

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 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	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 (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

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 dangerous 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):



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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- 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 dangerous 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 dangerous 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 dangerous 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 dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous 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 dangerous for this effect. For more information see section 3.
- G- Specific target organ toxicity (STOT)-repeated exposure:
 - 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 dangerous 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 dangerous 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 dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
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	

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:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Species	Genus
	LC50			
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		Crustacean
	EC50	0.1 - 1 mg/L		Algae
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		

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
	BOD5		Concentration	Non-applicable
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	COD	0.00202 g O ₂ /g	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	73 %
	BOD5	Non-applicable	Concentration	100 mg/L
Ethanol CAS: 64-17-5 EC: 200-578-6	COD	Non-applicable	Period	14 days
	BOD5/COD	0.57	% Biodegradable	89 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
	BCF	
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	
	Koc		Henry	
Ethanol CAS: 64-17-5 EC: 200-578-6	Koc	1	Henry	4,61E-1 Pa·m ³ /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 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
07 04 04*	other organic solvents, washing liquids and mother liquors	Dangerous

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

HP8 Corrosive



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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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. We do not recommended disposal down the drain. 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 2019 and RID 2019:



- 14.1 **UN 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:** No
- 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 **Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 38-16:



- 14.1 **UN 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:** No
- 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: 18
- 14.7 **Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2019:



Quatrodex Unit NF

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SECTION 14: TRANSPORT INFORMATION (continued)



14.1 UN 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:	No
14.6 Special precautions for user	
Physico-Chemical properties:	see section 9
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	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 Ethanol.

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, 6) ; 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

Seveso III:

Non-applicable

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

Non-applicable

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

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

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:

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 (Regulation (EC) No 2015/830)

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

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- Precautionary statements

Texts of the legislative phrases mentioned in section 2:

H314: Causes severe skin burns and eye damage

H318: Causes serious 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:



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SECTION 16: OTHER INFORMATION (continued)

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

Advice related to training:

Minimal 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: 5-day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient

Koc: Partition coefficient of organic carbon

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 -