



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

- 1.1 Product identifier:** Hand disinfectant
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Hand cleaner
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:**
Mayeri Industries AS
Tabivere, Tartu County
49127 Estonia
Phone: +372 77 66 700 - Fax: +372 77 66 701
www.mayeri.eu
kristel@mayeri.eu
- 1.4 Emergency telephone number:** National Response Centre +49 621 60-43333

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 Irrit. 2: Eye irritation, Category 2, H319
Flam. Liq. 2: Flammable liquids, Category 2, H225
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Danger

Hazard statements:
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 2: H225 - Highly flammable liquid and vapour
Precautionary statements:
P102: Keep out of reach of children
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313: If eye irritation persists: Get medical advice/attention
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**
Non-applicable
- 3.2 Mixture:**
Chemical description: Aqueous solution based on alcohols and surfactants.
Components:
In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification		Concentration
CAS: 64-17-5 EC: 200-578-6 Index: 603-002-00-5 REACH: 01-2119457610-43-XXXX	Ethanol⁽¹⁾	Self-classified Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger	70 - <80 %
CAS: 56-81-5 EC: 200-289-5 Index: Non-applicable REACH: 01-2119471987-18-XXXX	Glycerol⁽²⁾	Not classified Regulation 1272/2008	<2,5 %
CAS: 78-93-3 EC: 201-159-0 Index: 606-002-00-3 REACH: 01-2119457290-43-XXXX	Butanone⁽²⁾	ATP CLP00 Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	<1 %
CAS: 67-63-0 EC: 200-661-7 Index: 603-117-00-0 REACH: 01-2119457558-25-XXXX	Propan-2-ol⁽²⁾	ATP CLP00 Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	<1 %
CAS: 160901-19-9 EC: 500-457-0 Index: Non-applicable REACH: 01-2119490233-42-XXXX	Alcohols, C12-13, branched and linear, ethoxylated (> 5 - < 15 EO)⁽²⁾	Self-classified Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Chronic 3: H412; Eye Dam. 1: H318 - Danger	<0,25 %
CAS: 102-71-6 EC: 203-049-8 Index: Non-applicable REACH: 01-2119486482-31-XXXX	2,2',2''-nitrilotriethanol⁽²⁾	Not classified Regulation 1272/2008	<0,15 %
CAS: 3734-33-6 EC: 223-095-2 Index: Non-applicable REACH: 01-2120102843-65-XXXX	Denatonium benzoate⁽²⁾	Self-classified Regulation 1272/2008 Acute Tox. 2: H330; Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	<0,001 %

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

⁽²⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

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

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

In case the skin is affected (stinging, redness, rashes, blisters,...), seek medical help with this Safety Data Form.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂). 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:

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

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). 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:

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SECTION 7: HANDLING AND STORAGE (continued)

A.- Technical measures for storage

Minimum Temp.: 5 °C
Maximum Temp.: 35 °C

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		
Butanone CAS: 78-93-3 EC: 201-159-0		IOELV (8h)	200 ppm	600 mg/m ³
		IOELV (STEL)	300 ppm	900 mg/m ³

DNEL (Workers):

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	1900 mg/m ³	950 mg/m ³	Non-applicable
Glycerol CAS: 56-81-5 EC: 200-289-5	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	56 mg/m ³
Butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1161 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	600 mg/m ³	Non-applicable
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	888 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	500 mg/m ³	Non-applicable
Alcohols, C12-13, branched and linear, ethoxylated (> 5 - < 15 EO) CAS: 160901-19-9 EC: 500-457-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2080 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	294 mg/m ³	Non-applicable
2,2',2''-nitilotriethanol CAS: 102-71-6 EC: 203-049-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	6,3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	5 mg/m ³	5 mg/m ³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
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
Glycerol CAS: 56-81-5 EC: 200-289-5	Oral	Non-applicable	Non-applicable	229 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	33 mg/m ³
Butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	31 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	412 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	106 mg/m ³	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Non-applicable	Non-applicable	26 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	319 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	89 mg/m ³	Non-applicable
Alcohols, C12-13, branched and linear, ethoxylated (> 5 - < 15 EO) CAS: 160901-19-9 EC: 500-457-0	Oral	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1250 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	87 mg/m ³	Non-applicable
2,2',2''-nitritoltriethanol CAS: 102-71-6 EC: 203-049-8	Oral	Non-applicable	Non-applicable	13 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,25 mg/m ³	1,25 mg/m ³

PNEC:

Identification					
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	
Glycerol CAS: 56-81-5 EC: 200-289-5	STP	1000 mg/L	Fresh water	0,885 mg/L	
	Soil	0,141 mg/kg	Marine water	0,0885 mg/L	
	Intermittent	8,85 mg/L	Sediment (Fresh water)	3,3 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0,33 mg/kg	
Butanone CAS: 78-93-3 EC: 201-159-0	STP	709 mg/L	Fresh water	55,8 mg/L	
	Soil	22,5 mg/kg	Marine water	55,8 mg/L	
	Intermittent	55,8 mg/L	Sediment (Fresh water)	284,74 mg/kg	
	Oral	1000 g/kg	Sediment (Marine water)	284,7 mg/kg	
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	STP	2251 mg/L	Fresh water	140,9 mg/L	
	Soil	28 mg/kg	Marine water	140,9 mg/L	
	Intermittent	140,9 mg/L	Sediment (Fresh water)	552 mg/kg	
	Oral	0,16 g/kg	Sediment (Marine water)	552 mg/kg	
Alcohols, C12-13, branched and linear, ethoxylated (> 5 - < 15 EO) CAS: 160901-19-9 EC: 500-457-0	STP	10000 mg/L	Fresh water	0,022 mg/L	
	Soil	1 mg/kg	Marine water	0,022 mg/L	
	Intermittent	0,00282 mg/L	Sediment (Fresh water)	5,91 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	5,91 mg/kg	
2,2',2''-nitritoltriethanol CAS: 102-71-6 EC: 203-049-8	STP	10 mg/L	Fresh water	0,32 mg/L	
	Soil	0,151 mg/kg	Marine water	0,032 mg/L	
	Intermittent	5,12 mg/L	Sediment (Fresh water)	1,7 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0,17 mg/kg	

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



Non-applicable

D.- Ocular and facial protection



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2001 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.
	Anti-slip work shoes		EN ISO 20347:2012	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 20345:2012 y EN 13832-1:2007

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Gel
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	>35 °C
Vapour pressure at 20 °C:	4669 Pa
Vapour pressure at 50 °C:	22466,01 Pa (22,47 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	845 - 855 kg/m ³
Relative density at 20 °C:	0,845 - 0,855
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	7 - 7,8
Vapour density at 20 °C:	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)

Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

Flammability:

Flash Point:	21 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Not available
Upper flammability limit:	Not available

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	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

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

Dangerous health implications:

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: 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.

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

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Produces 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: Propan-2-ol (3); 2,2',2''-nitrilotriethanol (3)
- 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. However, it contains substances classified as dangerous for inhalation. 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: 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.

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
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
Glycerol CAS: 56-81-5 EC: 200-289-5	LD50 oral	12600 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
Butanone CAS: 78-93-3 EC: 201-159-0	LD50 oral	4000 mg/kg	Rat
	LD50 dermal	6400 mg/kg	Rabbit
	LC50 inhalation	23,5 mg/L (4 h)	Rat
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	LD50 oral	5280 mg/kg	Rat
	LD50 dermal	12800 mg/kg	Rat
	LC50 inhalation	72,6 mg/L (4 h)	Rat
Denatonium benzoate CAS: 3734-33-6 EC: 223-095-2	LD50 oral	1225 mg/kg	Mouse
	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

12.1 Toxicity:

Identification	Acute toxicity		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
Butanone CAS: 78-93-3 EC: 201-159-0	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Algae
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	LC50	9640 mg/L (96 h)	Pimephales promelas	Fish
	EC50	13299 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
Alcohols, C12-13, branched and linear, ethoxylated (> 5 - < 15 EO) CAS: 160901-19-9 EC: 500-457-0	LC50	10 - 100 mg/L (96 h)		Fish
	EC50	10 - 100 mg/L		Crustacean
	EC50	10 - 100 mg/L		Algae
2,2',2''-nitritotriethanol CAS: 102-71-6 EC: 203-049-8	LC50	11800 mg/L (96 h)	Pimephales promelas	Fish
	EC50	5600 mg/L (24 h)	Artemia salina	Crustacean
	EC50	216 mg/L (72 h)	Scenedesmus subspicatus	Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Ethanol CAS: 64-17-5 EC: 200-578-6	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	0.57	% Biodegradable	89 %
Glycerol CAS: 56-81-5 EC: 200-289-5	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	63 %
Butanone CAS: 78-93-3 EC: 201-159-0	BOD5	2.03 g O2/g	Concentration	Non-applicable
	COD	2.31 g O2/g	Period	20 days
	BOD5/COD	0.88	% Biodegradable	89 %
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	BOD5	1.19 g O2/g	Concentration	100 mg/L
	COD	2.23 g O2/g	Period	14 days
	BOD5/COD	0.53	% Biodegradable	86 %
2,2',2''-nitritotriethanol CAS: 102-71-6 EC: 203-049-8	BOD5	0.08 g O2/g	Concentration	100 mg/L
	COD	1.53 g O2/g	Period	14 days
	BOD5/COD	0.05	% Biodegradable	0 %

12.3 Bioaccumulative potential:

- CONTINUED ON NEXT PAGE -



SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
Ethanol CAS: 64-17-5 EC: 200-578-6	BCF	3
	Pow Log	-0.31
	Potential	Low
Glycerol CAS: 56-81-5 EC: 200-289-5	BCF	3
	Pow Log	-1.76
	Potential	Low
Butanone CAS: 78-93-3 EC: 201-159-0	BCF	3
	Pow Log	0.29
	Potential	Low
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	BCF	3
	Pow Log	0.05
	Potential	Low
2,2',2''-nitritotriethanol CAS: 102-71-6 EC: 203-049-8	BCF	3
	Pow Log	-1
	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 ³ /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,339E-2 N/m (25 °C)	Moist soil	Yes
Glycerol CAS: 56-81-5 EC: 200-289-5	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	6,516E-2 N/m (25 °C)	Moist soil	Non-applicable
Butanone CAS: 78-93-3 EC: 201-159-0	Koc	30	Henry	5,77 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,396E-2 N/m (25 °C)	Moist soil	Yes
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Koc	1.5	Henry	8,207E-1 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,24E-2 N/m (25 °C)	Moist soil	Yes
2,2',2''-nitritotriethanol CAS: 102-71-6 EC: 203-049-8	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	4,524E-2 N/m (25 °C)	Moist soil	Non-applicable

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)
20 01 29*	detergents containing hazardous substances	Dangerous

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

HP3 Flammable, HP4 Irritant — skin irritation and eye damage

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 recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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: | UN1993 |
| 14.2 UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (Ethanol) |
| 14.3 Transport hazard class(es): | 3 |
| Labels: | 3 |
| 14.4 Packing group: | II |
| 14.5 Environmental hazards: | No |
| 14.6 Special precautions for user | |
| Special regulations: | 274, 601, 640D |
| Tunnel restriction code: | D/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 39-18:



- | | |
|---|------------------------------------|
| 14.1 UN number: | UN1993 |
| 14.2 UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (Ethanol) |
| 14.3 Transport hazard class(es): | 3 |
| Labels: | 3 |
| 14.4 Packing group: | II |
| 14.5 Environmental hazards: | No |
| 14.6 Special precautions for user | |
| Special regulations: | 274 |
| EmS Codes: | F-E, S-E |
| Physico-Chemical properties: | see section 9 |
| Limited quantities: | 1 L |
| Segregation group: | Non-applicable |
| 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 2020:



- | | |
|---|------------------------------------|
| 14.1 UN number: | UN1993 |
| 14.2 UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. (Ethanol) |
| 14.3 Transport hazard class(es): | 3 |
| Labels: | 3 |
| 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 |

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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) ; Propan-2-ol (Product-type 1, 2, 4)

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.

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c		5000	50000

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 (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

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.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H319: Causes serious eye irritation

H225: Highly flammable liquid and vapour

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:



SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 2: H330 - Fatal if inhaled
Acute Tox. 4: H302 - Harmful if swallowed
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Eye Dam. 1: H318 - Causes serious eye damage
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 2: H225 - Highly flammable liquid and vapour
Skin Irrit. 2: H315 - Causes skin irritation
STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

Eye Irrit. 2: Calculation method
Flam. Liq. 2: Calculation method (2.6.4.3)

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 -