

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## CLEAMEN 112

Date of revision: 14. 02. 2025

Version: 2.0

Replaced version from: 03. 07. 2024

Date of issue: 09. 06. 2022

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

#### 1.1. Product identifier

**Product Name**

**CLEAMEN 112**

**UFI code**

UFI: REH0-G0C6-S00Q-57FT

**Product code**

TC112.

**Mixture description**

Water solution.

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

**Identified uses**

Liquid agent intended for wet washing of windows and frames.  
Professional and consumer use.

**Uses advised against**

Not known. It is recommended to use it only for the intended use. Other uses may expose users to unpredictable risks.

#### 1.3. Details of the supplier of the safety data sheet

**CORMEN s.r.o.**

Věchnov 73

593 01

Czech Republic

telephone: +420 566 550 961

Fax: +420 566 551 822

e-mail address for a competent person responsible for the SDS: [info@cormen.cz](mailto:info@cormen.cz)

#### 1.4. Emergency telephone number

112 (General emergency phone).

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

The mixture is classified as **hazardous** according to regulation 1272/2008/EC.

**Classification according to 1272/2008/EC**

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### Eye Irrit. 2; H319

Full text of classifications and H-phrases: see section 16.

#### **The most important adverse physical, human health and environmental effects**

Causes serious eye irritation.

### 2.2. Label elements

#### **Hazard pictograms**



#### **Signal word**

Warning

#### **Substances of the mixture to be placed on the label**

Are not.

#### **Hazard statements**

H319 Causes serious eye irritation.

#### **Precautionary statements**

P102 Keep out of reach of children.  
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 contents/container by handing it over to a collection yard or sorted waste.

#### **Supplemental hazard information**

EUH 208 - Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Composition according to regulation 648/2004/EC on detergents:  $\geq 5$  -  $< 15$  % anionic surfactants,  $< 5$  % perfumes, HEXYL CINNAMAL, preservation agents (BENZYL ALCOHOL, METHYLCHLOROISOTHIAZOLINONE AND METHYLISOTHIAZOLINONE).

### 2.3. Other hazards

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### 3.2.1. Substances of a mixture classified as hazardous

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Identification of substance		Content wt. %	Classification according to 1272/2008/EC
Propan-2-ol; Isopropyl alcohol; Isopropanol			
CAS Number	67-63-0	1 - < 5	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336
EC Number	200-661-7		
Index Number	603-117-00-0		
Registration Number	01-2119457558-25-XXXX		
Alcohols, C12-14, ethoxylated, sulfates, sodium salts			
CAS Number	68891-38-3	1 - < 5	Skin Irrit. 2; H315 Eye Dam. 1; H318
EC Number	500-234-8		
Index Number	not given		
Registration Number	01-2119488639-16-XXXX		
The substance has specific concentration limits:			
Eye Dam. 1; H318		C ≥ 10 %	
Eye Irrit. 2; H319		5 % < C < 10 %	
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts			
CAS Number	85586-07-8	1 - < 5	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412 ATE <sub>oral</sub> = 1 800 mg/kg bw
EC Number	287-809-4		
Index Number	not given		
Registration Number	01-2119489463-28-XXXX		
The substance has a bulk density ≥ 400 g/l.			
The substance has specific concentration limits:			
Eye Dam. 1; H318		C ≥ 20 %	
Eye Irrit. 2; H319		10 % ≤ C < 20 %	
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			

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CAS Number	55965-84-9		Acute Tox. 3; H301
EC Number	911-418-6		Acute Tox. 2; H310
Index Number	613-167-00-5	< 0.0015	Skin Corr. 1C; H314
Registration Number	01-2120764691-48-XXXX		Eye Dam. 1; H318
			Skin Sens. 1A; H317
			Acute Tox. 2; H330
			Aquatic Acute 1; H400
			Aquatic Chronic 1; H410
			EUH071
			M=100
			M(Chronic)=100
			ATE <sub>oral</sub> = 66 mg/kg bw
			ATE <sub>dermal</sub> = 87 mg/kg bw
			ATE <sub>inhalation</sub> = 0.17 mg/L (aerosol)

The substance has specific concentration limits:

Skin Corr. 1C; H314	$C \geq 0.6 \%$
Eye Dam. 1; H318	$C \geq 0.6 \%$
Skin Irrit. 2; H315	$0.06 \% \leq C < 0.6 \%$
Eye Irrit. 2; H319	$0.06 \% \leq C < 0.6 \%$
Skin Sens. 1A; H317	$C \geq 0.0015 \%$

### Ethanediol; Ethylene glycol

CAS Number	107-21-1		Acute Tox. 4; H302
EC Number	203-473-3		STOT RE 2; H373
Index Number	603-027-00-1	< 0.001	(kidney) (oral)
Registration Number	01-2119456816-28-XXXX		ATE <sub>oral</sub> = 500 mg/kg bw

Full text of classifications and H-phrases: see section 16.

## SECTION 4: First aid measures

In all cases keep the victim at physical and mental rest and warm. In case of doubt or if symptoms persist, seek medical attention. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing. Protect yourself during rescue work.

### 4.1. Description of first aid measures

#### Inhalation

Interrupt the exposure, move the person to the fresh air. In case of persistent nausea, seek medical advice.

#### Skin contact

Remove contaminated clothing, shoes, and wash affected skin thoroughly with water (preferably lukewarm) and soap. Do not use solvents or thinners. If the problem persists, seek medical advice.

#### Eye contact

Rinse with a gentle stream of water for at least 15 minutes. Keep your eyelids wide open with your thumb and forefinger. If the affected person is wearing contact lenses, remove them before rinsing eyes if it is easy. If pain or redness persists, seek medical advice.

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### **Ingestion**

Rinse your mouth and then drink plenty of water. Do not induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Seek medical advice.

### **4.2. Most important symptoms and effects, both acute and delayed**

Are not known.

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

Treat symptomatically and supportively.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

##### Small fire:

Carbon dioxide CO<sub>2</sub>, dry extinguishing agent, sand or earth, alcohol-resistant foam.

##### Extensive fire:

Fragmented water streams (water mist), alcohol-resistant foam.

#### **Unsuitable extinguishing media**

Solid streams of water may be ineffective.

### **5.2. Special hazards arising from the substance or mixture**

In case of fire extinguishing prevent leakage of water and rest of product into drains. Collect them separately and dispose of safely in accordance with current legislation and applicable local regulations.

In case of fires, hazardous combustion gases are formed: carbon oxides, sulphur oxides, hydrogen sulphide, nitrogen oxides, ammonia, chlorine oxides, hydrogen chloride and products of incomplete combustion.

### **5.3. Advice for firefighters**

Stop further leakage of product if possible. Spilled product, which does not burn, cover with sand or foam. Move containers and barrels away from the fire to a safe place, if possible. Cool all affected containers down with flooding quantities of water. If the fire can't be extinguished - evacuate the premises.

In case of fire, wear suitable respiratory protective equipment and fire-fighting suit.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes, use suitable protective equipment and clothing, see Section 8. Ensure adequate ventilation. Avoid formation of vapour and aerosol. At the point of leakage, prevent the movement of unauthorized persons.

### **6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. If this cannot be avoided, inform the competent authorities (police and firefighters) immediately.

### **6.3. Methods and material for containment and cleaning up**

According to the amount of spilled liquid, drain away the substance (large spillage) or in case of small spillage, absorb it with suitable absorbent (vermiculite, dry sand), put into labelled closed containers and dispose of them accordingly to Section 13. Flush residues with water and collect it for waste disposal. Do not use solvents or dispersants unless instructed by an expert or government authority.

If container is damaged, remove the content to the new undamaged container and label it properly again.

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### 6.4. Reference to other sections

Refer also to the provisions of sections 7, 8 and 13 of this safety data sheet.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid contact with skin and eyes. Personal protection see. Section 8. Ensure good ventilation to prevent formation of vapour and aerosol.

Smoking, eating and drinking should be prohibited at the place of use. Keep safety regulations for handling chemicals. Take off contaminated clothing and protective equipment before entering the dining area. Do not use dirty clothing. After work wash yourself carefully with warm water and soap, take a shower. Use protective cream.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in original, tightly closed containers, in a dry, cool and well-ventilated place at room temperature.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

Do not store together with incompatible materials (see subsection 10.5), food, drink and feed.

### 7.3. Specific end use(s)

See subsection 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. Exposure limit value

Ethanediol CAS: 107-21-1

Limit values - Eight hours	Limit values - Short-term	Note
52 mg/m <sup>3</sup> 20 ppm	104 mg/m <sup>3</sup> 40 ppm	Skin

#### 8.1.2. Biological limit values

Not determined in EU.

#### 8.1.3. DNEL and PNEC values

Propan-2-ol CAS: 67-63-0

#### DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	500 mg/m <sup>3</sup>
Workers	Inhalation	Systemic effect	Acute/short term	1 000 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	888 mg/kg/day
General population	Inhalation	Systemic effect	Long term	89 mg/m <sup>3</sup>
General population	Inhalation	Systemic effect	Acute/short term	178 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	319 mg/kg/day
General population	Oral	Systemic effect	Long term	26 mg/kg/day
General population	Oral	Systemic effect	Acute/short term	51 mg/kg/day

PNEC - not available

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<b>Alcohols, C12-14, ethoxylated, sulfates, sodium salts</b>				CAS: 68891-38-3
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	411 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	5 830 mg/kg/day
General population	Inhalation	Systemic effect	Long term	87.1 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	2 500 mg/kg/day
General population	Oral	Systemic effect	Long term	25 mg/kg/day
<b>PNEC</b>				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.129 mg/l	0.013 mg/l	0.71 mg/l	0.071 mg/l	10 g/l
<b>PNEC</b>				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
4.835 mg/kg	0.483 mg/kg	no effect	7.5 mg/kg	no effect
<b>Sulfuric acid, mono-C12-14-alkyl esters, sodium salts</b>				CAS: 85586-07-8
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	285 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	4 060 mg/kg/day
General population	Inhalation	Systemic effect	Long term	85 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	2 440 mg/kg/day
General population	Oral	Systemic effect	Long term	24 mg/kg/day
<b>PNEC</b>				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.131 mg/l	0.013 mg/l	0.036 mg/l	not given	1.35 mg/l
<b>PNEC</b>				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
4.61 mg/l	0.461 mg/kg	no effect	0.846 mg/kg	no effect
<b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b>				CAS: 55965-84-9
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	0.02 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Long term	0.04 mg/m <sup>3</sup>



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General population	Inhalation	Systemic effect	Long term	0.02 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Long term	0.04 mg/m <sup>3</sup>
General population	Oral	Systemic effect	Long term	0.09 mg/kg/day
General population	Oral	Local effect	Long term	0.11 mg/kg/day
<b>PNEC</b>				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
3.39 µg/l	3.39 µg/l	3.39 µg/l	3.39 µg/l	0.23 mg/l
<b>PNEC</b>				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.027 mg/kg	0.027 mg/kg	no effect	0.01 mg/kg	no effect
<b>Ethanediol</b>				CAS: 107-21-1
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Local effect	Long term	35 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	106 mg/kg/day
General population	Inhalation	Local effect	Long term	7 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	53 mg/kg/day
<b>PNEC - not available</b>				
<b>8.2. Exposure controls</b>				
<b>8.2.1. Appropriate engineering controls</b>				
Use only in well-ventilated areas.				
Observe usual safety precautions for working with chemicals. The degree of effectiveness of personal protective equipment depends on temperature and ventilation levels.				
<b>8.2.2. Individual protection measures, such as personal protective equipment</b>				
Do not eat, drink or smoke. After work, wash thoroughly with warm water and soap and take a shower. Use protective cream. Do not soiled protective equipment to wash, do not use solvents.				
<b>Eye/face protection</b>				
Wear safety goggles or face shield when manufacturing and handling the product (EN 166, EN 149+A1). It is not necessary for normal use, in case of possible contact with the eyes, use protective glasses or a face shield.				
<b>Skin protection - hand protection</b>				
Wear protective gloves when manufacturing and handling the product (EN 374-1, EN 374-2). In normal use it is not necessary to use protective gloves. Wear protective gloves in case of prolonged skin contact.				
The selection of the glove material on consideration of the breakthrough time, permeability, degradation and next relevant factors; other chemicals that may come into contact, physical requirements (cut and puncture protection, dexterity, thermal protection), possible body reactions to the glove material and the glove supplier's instructions and specifications. In case of repeated use of gloves, clean and keep them in a well-ventilated place before taking off.				



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### **Skin protection - other**

Suitable protective working clothing and footwear.

### **Respiratory protection**

Not necessary in case of compliance concentration limits (if they were exceeded, use respiratory protection). In the event of an accident or a fire use self-contained breathing apparatus.

### **Thermal hazards**

In normal use, it is not necessary to use protective equipment to be worn for materials that represent a thermal hazard.

### **8.2.3. Environmental exposure controls**

Uncontrolled release of the mixture into environment is to be avoided. Keep the emission limits according to national legislation.

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

#### **Mixture**

<b>Physical state</b>	Liquid.
<b>Colour</b>	Light blue.
<b>Odour</b>	Characteristic.
<b>Melting point/freezing point</b>	Not determined.
<b>Boiling point or initial boiling point and boiling range</b>	100 °C.
<b>Flammability</b>	Not determined.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.
<b>Flash point</b>	51 °C.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition temperature</b>	Not determined, the mixture does not contain self-reactive substances or organic peroxides or other substances which may decompose.
<b>pH</b>	7.0 - 8.0 (20 °C).
<b>Kinematic viscosity</b>	Not determined, the mixture does not contain a substance classified as aspiration toxic, or the sum of the concentrations of substances classified as aspiration toxic is less than 10 wt. %.
<b>Solubility</b>	Miscible.
<b>Partition coefficient n-octanol/water (log value)</b>	Does not apply to mixture.
<b>Vapour pressure</b>	23 hPa.
<b>Density and/or relative density</b>	$D_4^{20} = 1.0$ .
<b>Relative vapour density</b>	Not determined.
<b>Particle characteristics</b>	Does not apply to liquid.

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Propan-2-ol		CAS: 67-63-0
<b>Physical state</b>	Liquid.	
<b>Colour</b>	Colopurless.	
<b>Odour</b>	Not determined.	
<b>Melting point/freezing point</b>	-88.5 °C (literature).	
<b>Boiling point or initial boiling point and boiling range</b>	82.3 °C (literature).	
<b>Flammability</b>	Highly flammable liquid.	
<b>Lower explosion limit</b>	2 vol. % (literature).	
<b>Upper explosion limit</b>	13 vol. % (literature).	
<b>Flash point</b>	11.7 °C (literature).	
<b>Auto-ignition temperature</b>	399 - 455.6 °C (literature).	
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.	
<b>pH</b>	Not determined.	
<b>Kinematic viscosity</b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.	
<b>Solubility</b>	Miscible with water.	
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = 0.05 (25 °C, literature).	
<b>Vapour pressure</b>	Not determined.	
<b>Density and/or relative density</b>	785.5 kg/m <sup>3</sup> (20 °C, literature).	
<b>Relative vapour density</b>	Not determined.	
<b>Particle characteristics</b>	Does not apply to liquid.	
Alcohols, C12-14, ethoxylated, sulfates, sodium salts		CAS: 68891-38-3
<b>Physical state</b>	Solid.	
<b>Colour</b>	Yellowish.	
<b>Odour</b>	Rancid.	
<b>Melting point/freezing point</b>	> 300 °C (ASTM E737-76).	
<b>Boiling point or initial boiling point and boiling range</b>	Not determined, the substance has a melting point higher than 300 °C.	
<b>Flammability</b>	The substance is not classified as flammable solid (EU method A.10)	
<b>Lower explosion limit</b>	Does not apply to solid.	
<b>Upper explosion limit</b>	Does not apply to solid.	
<b>Flash point</b>	Does not apply to solid.	
<b>Auto-ignition temperature</b>	250 °C (EU method A.16)	
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.	

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<b>pH</b>	Not determined.
<b>Kinematic viscosity</b>	Does not apply to solid.
<b>Solubility</b>	280 g/l (20 °C, pH = 6.8, literature).
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = 0.3 (23 °C, pH = 6.1, OECD 123).
<b>Vapour pressure</b>	Not determined, the substance has melting point higher than 300 °C.
<b>Density and/or relative density</b>	1.08 g/cm <sup>3</sup> (22 °C, OECD 109).
<b>Relative vapour density</b>	Does not apply to solid.
<b>Particle characteristics</b>	Not determined.
<b>Sulfuric acid, mono-C12-14-alkyl esters, sodium salts</b> <span style="float: right;">CAS: 85586-07-8</span>	
<b>Physical state</b>	Solid.
<b>Colour</b>	Not determined.
<b>Odour</b>	Not determined.
<b>Melting point/freezing point</b>	102 °C (OECD 102).
<b>Boiling point or initial boiling point and boiling range</b>	Not determined, substance decomposes.
<b>Flammability</b>	The substance is not classified as flammable (EU method A.10).
<b>Lower explosion limit</b>	Does not apply to solid.
<b>Upper explosion limit</b>	Does not apply to solid.
<b>Flash point</b>	Does not apply to solid.
<b>Auto-ignition temperature</b>	> 302 °C (VDI_2263).
<b>Decomposition temperature</b>	> 187 °C (OECD 103).
<b>pH</b>	10.4 (1% aqueous solution, DGF H-III 1).
<b>Kinematic viscosity</b>	Does not apply to solid.
<b>Solubility</b>	> 400 g/l (20 °C, OECD 105).
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow ≤ -2.42 (20 °C, calculation).
<b>Vapour pressure</b>	Not determined.
<b>Density and/or relative density</b>	D <sub>4</sub> <sup>20</sup> = 1.155 (OECD 109).
<b>Relative vapour density</b>	Does not apply to solid.
<b>Particle characteristics</b>	D50 = 882 µm (DIN 66165-2).
<b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b> <span style="float: right;">CAS: 55965-84-9</span>	
<b>Physical state</b>	Liquid.
<b>Colour</b>	Light yellow.
<b>Odour</b>	Not determined.
<b>Melting point/freezing point</b>	< -25 °C (OECD 102).

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<b>Boiling point or initial boiling point and boiling range</b>	100.1 °C (OECD 103).
<b>Flammability</b>	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.
<b>Flash point</b>	> 110 °C (EU method A.9).
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
<b>pH</b>	3.43 (20 °C, 10 g/l, CIPAC MT 75).
<b>Kinematic viscosity</b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
<b>Solubility</b>	> 1 000 g/l (20 °C, pH = 5 - 9, OECD 105).
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = 0.326 (2-methyl-2H-isothiazol-3-one, 24 °C, OECD 107). log Pow = 2.519 (5-chloro-2-methyl-2H-isothiazol-3-one, 24 °C, OECD 107).
<b>Vapour pressure</b>	0.003 Pa (25 °C, OECD 104).
<b>Density and/or relative density</b>	D <sub>4</sub> <sup>20</sup> = 1.294 (OECD 109).
<b>Relative vapour density</b>	Not determined.
<b>Particle characteristics</b>	Does not apply to liquid.
<b>Ethanediol</b> CAS: 107-21-1	
<b>Physical state</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Odourless.
<b>Melting point/freezing point</b>	-12.69 °C (literature).
<b>Boiling point or initial boiling point and boiling range</b>	197.4 °C (literature).
<b>Flammability</b>	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.
<b>Flash point</b>	115 °C (literature).
<b>Auto-ignition temperature</b>	412 °C (literature).
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.

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<b>pH</b>	Not determined.
<b>Kinematic viscosity</b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
<b>Solubility</b>	Miscible.
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = -1.36 (literature).
<b>Vapour pressure</b>	100 Pa (51.1 °C, literature). 1 kPa (86.1 °C, literature). 10 kPa (132.5 °C, literature). 100 kPa (196.9 °C, literature).
<b>Density and/or relative density</b>	1.11 g/cm <sup>3</sup> (DIN 51557).
<b>Relative vapour density</b>	Not determined.
<b>Particle characteristics</b>	Does not apply to liquid.

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

##### Mixture

##### **Explosives**

Data for the mixture are not available.

The mixture does not contain substances classified as explosives or oxidising, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

##### **Flammable gases**

It is not gas.

##### **Aerosols**

It is not aerosol.

##### **Oxidising gases**

It is not gas.

##### **Gases under pressure**

It is not gas.

##### **Flammable liquids**

The mixture is not classified as a flammable liquid according to the negative result of the sustained burning test according to ČSN EN ISO 9038.

##### **Flammable solids**

It is not solid.

##### **Self-reactive substances and mixtures**

Data for the mixture are not available.

The mixture does not contain substances classified as self-reactive substances or explosives or organic peroxides or oxidising, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

##### **Pyrophoric liquids**

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Data for the mixture are not available.

The mixture does not contain substances classified as pyrophoric liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Pyrophoric solids***

It is not solid.

### ***Self-heating substances and mixtures***

Data for the mixture are not available.

The mixture does not contain substances classified as self-heating or pyrophoric substances or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Substances and mixtures, which emit flammable gases in contact with water***

Data for the mixture are not available.

The mixture does not contain substances classified as substances, which emit flammable gases in contact with water or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Oxidising liquids***

Data for the mixture are not available.

The mixture does not contain substances classified as oxidising liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Oxidizing solids***

It is not solid.

### ***Organic peroxides***

Data for the mixture are not available.

The mixture does not contain substances classified as organic peroxides or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Corrosive to metals***

Data for the mixture are not available.

The mixture does not contain substances classified as corrosive to metals or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Desensitised explosives***

Data for the mixture are not available.

The mixture does not contain substances classified as explosives or desensitised explosives, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Propan-2-ol**

CAS: 67-63-0

### ***Explosives***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

Pure propan-2-ol is autoxidated by air and light to form an explosive cyclic triacetone triperoxide, which settles to the bottom of the vessel as a white sediment. In the event of such a finding, the container must be handled immediately and pyrotechnics called.

### ***Flammable gases***

It is not gas.

### ***Aerosols***

It is not aerosol.

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### ***Oxidising gases***

It is not gas.

### ***Gases under pressure***

It is not gas.

### ***Flammable liquids***

The substance is classified as flammable liquid category 2 according to the value of the flash point and boiling point.

### ***Flammable solids***

It is not solid.

### ***Self-reactive substances and mixtures***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

### ***Pyrophoric liquids***

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

### ***Pyrophoric solids***

It is not solid.

### ***Self-heating substances and mixtures***

Data for the substance are not available.

The substance is not classified as self-heating.

### ***Substances and mixtures, which emit flammable gases in contact with water***

Data for the substance are not available.

The chemical structure of the substance does not contain metals or metalloids.

The substance is miscible with water and forms a stable mixture with it.

### ***Oxidising liquids***

Data for the substance are not available.

It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

### ***Oxidizing solids***

It is not solid.

### ***Organic peroxides***

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

### ***Corrosive to metals***

Data for the substance are not available.

The substance is not classified as corrosive to metal.

### ***Desensitised explosives***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.



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<b>Alcohols, C12-14, ethoxylated, sulfates, sodium salts</b>	CAS: 68891-38-3
<b>Explosives</b>	
Data for the substance are not available. The substance does not contain chemical groups associated with explosive properties.	
<b>Flammable gases</b>	
It is not gas.	
<b>Aerosols</b>	
It is not aerosol.	
<b>Oxidising gases</b>	
It is not gas.	
<b>Gases under pressure</b>	
It is not gas.	
<b>Flammable liquids</b>	
It is not liquid.	
<b>Flammable solids</b>	
The substance is not classified as flammable solid, burning time > 2 400 s (EU method A.10).	
<b>Self-reactive substances and mixtures</b>	
Data for the substance are not available. The substance does not contain chemical groups associated with explosive or self-reactive properties.	
<b>Pyrophoric liquids</b>	
It is not liquid.	
<b>Pyrophoric solids</b>	
Data for the substance are not available. The substance is stable in air, there is no spontaneous ignition.	
<b>Self-heating substances and mixtures</b>	
Data for the substance are not available. The substance is not classified as self-heating.	
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	
Data for the substance are not available. The chemical structure of the substance does not contain metals or metalloids. The substance is miscible with water and forms a stable mixture with it.	
<b>Oxidising liquids</b>	
It is not liquid.	
<b>Oxidizing solids</b>	
Data for the substance are not available. It is an organic substance does not contain chemical groups associated with oxidising properties.	
<b>Organic peroxides</b>	

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## CLEAMEN 112

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

### **Corrosive to metals**

Data for the substance are not available.

The substance is not classified as corrosive to metal.

### **Desensitised explosives**

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

**Sulfuric acid, mono-C12-14-alkyl esters, sodium salts**

CAS: 85586-07-8

### **Explosives**

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

### **Flammable gases**

It is not gas.

### **Aerosols**

It is not aerosol.

### **Oxidising gases**

It is not gas.

### **Gases under pressure**

It is not gas.

### **Flammable liquids**

It is not liquid.

### **Flammable solids**

The substance is not classified as flammable solid, burning time = 69 s (EU method A.10).

### **Self-reactive substances and mixtures**

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

### **Pyrophoric liquids**

It is not liquid.

### **Pyrophoric solids**

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

### **Self-heating substances and mixtures**

Data for the substance are not available.

The substance is not classified as self-heating.

### **Substances and mixtures, which emit flammable gases in contact with water**

Data for the substance are not available.

The substance is soluble in water and forms a stable mixture with it.

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<b><i>Oxidising liquids</i></b>	
It is not liquid.	
<b><i>Oxidizing solids</i></b>	
Data for the substance are not available. It is an organic substance does not contain chemical groups associated with oxidising properties.	
<b><i>Organic peroxides</i></b>	
Data for the substance are not available. The substance does not contain a bivalent group -O-O- with at least one organic radical.	
<b><i>Corrosive to metals</i></b>	
Data for the substance are not available. The substance is not classified as corrosive to metal.	
<b><i>Desensitised explosives</i></b>	
Data for the substance are not available. The substance does not contain chemical groups associated with explosive properties.	
<b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b>	CAS: 55965-84-9
<b><i>Explosives</i></b>	
Data for the substance are not available. The substance does not contain chemical groups associated with explosive properties.	
<b><i>Flammable gases</i></b>	
It is not gas.	
<b><i>Aerosols</i></b>	
It is not aerosol.	
<b><i>Oxidising gases</i></b>	
It is not gas.	
<b><i>Gases under pressure</i></b>	
It is not gas.	
<b><i>Flammable liquids</i></b>	
The substance is not classified as flammable liquid according to the value of the flash point and boiling point.	
<b><i>Flammable solids</i></b>	
It is not solid.	
<b><i>Self-reactive substances and mixtures</i></b>	
Data for the substance are not available. The substance does not contain chemical groups associated with explosive or self-reactive properties.	
<b><i>Pyrophoric liquids</i></b>	
Data for the substance are not available. The substance is stable in air, there is no spontaneous ignition.	
<b><i>Pyrophoric solids</i></b>	

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## CLEAMEN 112

It is not solid.

### ***Self-heating substances and mixtures***

Data for the substance are not available.

The substance is not classified as self-heating.

### ***Substances and mixtures, which emit flammable gases in contact with water***

Data for the substance are not available.

The chemical structure of the substance does not contain metals or metalloids.

The substance is miscible with water and forms a stable mixture with it.

### ***Oxidising liquids***

Data for the substance are not available.

It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

### ***Oxidizing solids***

It is not solid.

### ***Organic peroxides***

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

### ***Corrosive to metals***

Data for the substance are not available.

The substance is not classified as corrosive to metal.

### ***Desensitised explosives***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

**Ethanediol**

CAS: 107-21-1

### ***Explosives***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

### ***Flammable gases***

It is not gas.

### ***Aerosols***

It is not an aerosol.

### ***Oxidising gases***

It is not gas.

### ***Gases under pressure***

It is not gas.

### ***Flammable liquids***

The substance is not classified as flammable liquid according to the value of the flash point and boiling point.

### ***Flammable solids***

It is not solid.

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### ***Self-reactive substances and mixtures***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

### ***Pyrophoric liquids***

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

### ***Pyrophoric solids***

It is not solid.

### ***Self-heating substances and mixtures***

Data for the substance are not available.

The substance is not classified as self-heating.

### ***Substances and mixtures, which emit flammable gases in contact with water***

Data for the substance are not available.

The chemical structure of the substance does not contain metals or metalloids.

The substance is miscible with water and forms a stable mixture with it.

### ***Oxidising liquids***

Data for the substance are not available.

It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

### ***Oxidizing solids***

It is not solid.

### ***Organic peroxides***

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

### ***Corrosive to metals***

Data for the substance are not available.

The substance is not classified as corrosive to metal.

### ***Desensitised explosives***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

### **9.2.2. Other safety characteristics**

#### ***Mechanical sensitivity***

Not determined, it is not an explosive substance.

#### ***Self-accelerating polymerisation temperature***

Not determined, it is not a polymerising substance.

#### ***Formation of explosible dust/air mixtures***

Not determined, it is not a dust.

#### ***Acid/alkaline reserve***

Not determined, pH is in the range 4 - 10.

#### ***Evaporation rate***

Not determined.

#### ***Miscibility***

Not determined.

#### ***Conductivity***

Not determined.

#### ***Corrosiveness***

Not determined.

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<b>Gas group</b>	Not determined, it is not gas.
<b>Redox potential</b>	Not determined.
<b>Radical formation potential</b>	Not determined.
<b>Photocatalytic properties</b>	Not determined.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The mixture is stable under normal conditions of use. There aren't any hazardous reaction.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

Hazardous reactions aren't known under normal conditions of use.

#### 10.4. Conditions to avoid

Protect from temperatures below 0 °C.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

#### 10.5. Incompatible materials

Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

They do not form under normal use. Burning releases carbon oxides, sulphur oxides, hydrogen sulphide, nitrogen oxides, ammonia, chlorine oxides, hydrogen chloride and products of incomplete combustion.

### SECTION 11: Toxicological information

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

##### Mixture

##### Acute toxicity

The mixture is not classified as toxic for all routes of exposure.

**Oral** Data for the mixture are not available.  
ATE<sub>mixture</sub> > 2 000 mg/kg bw (estimate, low concentration of substances classified as toxic oral route of exposure).

**Dermal** Data for the mixture are not available.  
The mixture does not contain relevant substances classified as an acute toxicity by dermal route of exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

**Inhalation** Data for the mixture are not available.  
The mixture does not contain relevant substances classified as an acute toxicity by inhalation route of exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

##### Skin corrosion/irritation

Data for the mixture are not available.  
The mixture is not classified as skin irritant based on the general/specific concentration limits of substance(s).

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### ***Serious eye damage/irritation***

Data for the mixture are not available.

The mixture is classified as eye irritant based on the general/specific concentration limits of substance(s).

### ***Respiratory or skin sensitisation***

Data for the mixture are not available.

The mixture is not classified as a skin sensitizing according to the general/specific concentration limits of substance(s).

Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

### ***Germ cell mutagenicity***

Data for the mixture are not available.

The mixture does not contain substances classified as mutagenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Carcinogenicity***

Data for the mixture are not available.

The mixture does not contain substances classified as carcinogenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Reproductive toxicity***

Data for the mixture are not available.

The mixture does not contain substances classified as toxic for reproduction or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***STOT – single exposure***

Data for the mixture are not available.

The mixture is not classified as toxic for specific target organs in a single exposure in category 3 according to the recommended concentration limits of substance(s).

### ***STOT – repeated exposure***

Data for the mixture are not available.

The mixture does not contain relevant substances classified as toxic for specific target organs in a repeated exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Aspiration hazard***

Data for the mixture are not available.

The mixture does not contain substances classified as aspiration hazard or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### ***Other information***

See section 2 and 4.

### **Propan-2-ol**

CAS: 67-63-0

### ***Acute toxicity***

#### ***Oral***

Based on available data, the classification criteria are not met.  
LD<sub>50</sub> = 5 840 mg/kg bw (rat, OECD 401).

#### ***Dermal***

Based on available data, the classification criteria are not met.  
LD<sub>50</sub> = 16.4 ml/kg bw (12 792 mg/kg bw at a density of 0.78 g/cm<sup>3</sup>, rabbit, OECD 402).



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**Inhalation** Based on available data, the classification criteria are not met.  
LC<sub>50</sub> > 10 000 ppm (vapour, 6 h, OECD 403).

### **Skin corrosion/irritation**

Based on available data, the classification criteria are not met.  
Mean erythema score = 0 and oedema = 0 (rabbit, OECD 404).

### **Serious eye damage/irritation**

The substance is classified as eye irritant.  
Total mean irritation score = 1.89 (rabbit, 72 h, OECD 405).

### **Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.  
Not skin sensitising (guinea pig, OECD 406).

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.  
Negative (OECD 471, OECD 476).

### **Carcinogenicity**

Based on available data, the classification criteria are not met.  
NOAEL = 5 000 ppm (testicular tumors, rat, male, vapour, OECD 451).

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.  
NOAEL = 853 mg/kg/day (rat, oral, generation P0, OECD 415).

### **STOT – single exposure**

The substance may cause drowsiness or dizziness.

### **STOT – repeated exposure**

Based on available data, the classification criteria are not met.  
NOEC = 500 ppm (specific toxic effect, rat, vapour, 104 weeks, OECD 451).  
NOAEC = 5 000 ppm (specific exposure-related adverse reaction, rat, vapour, 104 weeks, OECD 451).  
NOEC = 5 000 ppm (effects of oncogenicity, rat, vapour, 104 weeks, OECD 451).

### **Aspiration hazard**

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

**Alcohols, C12-14, ethoxylated, sulfates, sodium salts**

CAS: 68891-38-3

### **Acute toxicity**

**Oral** Based on available data, the classification criteria are not met.  
LD<sub>50</sub> = 4 100 mg/kg bw (rat, OECD 401).

**Dermal** Based on available data, the classification criteria are not met.  
LD<sub>50</sub> > 2 000 mg/kg bw (rabbit, OECD 402).

**Inhalation** Data for the substance are not available.

### **Skin corrosion/irritation**

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## CLEAMEN 112

The substance is classified as skin irritant.

Mean erythema score = 3.2 and oedema = 3.2 (fully reversible) (rabbit, 72 hrs., OECD 404).

### **Serious eye damage/irritation**

The substance is classified as seriously damaging to the eyes.

Mean score of corneal opacity = 1.3 (not fully reversible after 21 days), iritis = 0.8 (not fully reversible after 21 days), conjunctival redness = 3 (fully reversible), conjunctival edema = 1 (fully reversible) (rabbit, 72 h, OECD 405)

### **Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

Not skin sensitising (guinea pig, OECD 406).

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

Negative (OECD 471, OECD 476).

### **Carcinogenicity**

Data for the substance are not available.

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.

NOAEL = 300 mg/kg/day (systemic effects, rat, oral, generation P0, OECD 416).

NOAEL = 300 mg/kg/day (reproduction, rat, oral, generation P0, OECD 416).

NOAEL = 300 mg/kg/day (rat, oral, generation F1, OECD 416).

### **STOT – single exposure**

Data for the substance are not available.

### **STOT – repeated exposure**

Based on available data, the classification criteria are not met.

NOAEL > 225 mg/kg/day (systemic toxicity, rat, oral, 90 days, OECD 408).

### **Aspiration hazard**

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

**Sulfuric acid, mono-C12-14-alkyl esters, sodium salts**

CAS: 85586-07-8

### **Acute toxicity**

**Oral** The substance is classified in category 4.

ATE = 1 800 mg/kg bw (according to registration documentation).

**Dermal** Based on available data, the classification criteria are not met.

LD<sub>50</sub> > 2 000 mg/kg bw (rabbit, OECD 402).

**Inhalation** Data for the substance are not available.

### **Skin corrosion/irritation**

The substance is classified as skin irritant.

Mean erythema score = 2.2 (not fully reversible after 72 hours) and oedema = 1.7 (not fully reversible after 72 hours) (rabbit, 72 hrs., OECD 404).

### **Serious eye damage/irritation**

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The substance is classified as seriously damaging to the eyes.

Mean score of corneal opacity = 2.3 (not fully reversible after 7 days), iritis = 1.0 (not fully reversible after 7 days), conjunctival redness = 2.3 (not fully reversible after 7 days), conjunctival oedema = 2.9 (not fully reversible after 7 days) (rabbit, 72 hrs., OECD 405).

### **Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

Not skin sensitising (guinea pig, maximization test).

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

Negative (OECD 471, OECD 476).

### **Carcinogenicity**

Based on available data, the classification criteria are not met.

NOEL  $\geq$  1 125 mg/kg/day (rat, oral, OECD 453).

### **Reproductive toxicity**

Data for the substance are not available.

### **STOT – single exposure**

Data for the substance are not available.

### **STOT – repeated exposure**

Based on available data, the classification criteria are not met.

NOAEL = 488 mg/kg/day (rat, oral, 90 d., OECD 408).

NOAEL = 1 016 mg/kg/day (rat, oral, 90 d., OECD 408).

### **Aspiration hazard**

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

**Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)**

CAS: 55965-84-9

### **Acute toxicity**

**Oral** The substance is classified in category 3.

LD<sub>50</sub> = 66 mg/kg bw (rat, OECD 401).

**Dermal** The substance is classified in category 2.

LD<sub>50</sub> = 87 mg/kg bw (rat, OECD literature).

**Inhalation** The substance is classified in category 2.

LC<sub>50</sub> = 0.17 mg/l (aerosol, rat, 4 hrs., OECD 403).

### **Skin corrosion/irritation**

The substance is classified as skin corrosion in category 1C.

Mean erythema score = 1.7 (exposure time 4 hours, fully reversible in 11 days) and edema = 0.7 (exposure time 4 hours, fully reversible in 8 days) (rabbit, 72 hours, OECD 404).

### **Serious eye damage/irritation**

The substance is classified as seriously damaging to the eyes (rabbit, 72 hrs., literature).

### **Respiratory or skin sensitisation**

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The substance is classified as skin sensitising in category 1A (guinea pig, OECD 406).

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

#### In vitro:

Pozitive (OECD 471, OECD 476).

#### In vivo:

Negative (OECD 474, OECD 475, OECD 477, OE3CD 486).

### **Carcinogenicity**

Based on available data, the classification criteria are not met.

NOEL = 300 ppm (rat, oral, OECD 453).

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.

NOAEL = 30 ppm (overall effect, rat, oral, generation P0, OECD 416).

NOAEL = 300 ppm (reproduction, rat, oral, generation P1, OECD 416).

NOAEL = 300 ppm (reproduction and development, rat, oral, generation F1, OECD 416).

NOAEL = 300 ppm (viability, clinical signs, rat, oral, generation F2, OECD 416).

### **STOT – single exposure**

Data for the substance are not available.

### **STOT – repeated exposure**

Based on available data, the classification criteria are not met.

NOAEL = 6.28 mg/kg/day (overall effect, rat, oral, 90 d., OECD 408).

NOAEL = 0.4 mg/kg/day (overall effect, rabbit, dermal, 90 d., OECD 411).

NOAEC = 0.34 mg/kg/day (histopathology, rat, aerosol, 90 d., OECD 413).

### **Aspiration hazard**

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

Ethanediol

CAS: 107-21-1

### **Acute toxicity**

#### **Oral**

The substance is classified in category 4 according to harmonized classification.

LD<sub>50</sub> = 7 712 mg/kg bw (rat, 30% solution, BASF test).

ATE = 500 mg/kg bw (for calculation by additive formula).

#### **Dermal**

Based on available data, the classification criteria are not met.

LD<sub>50</sub> > 3 500 mg/kg bw (mouse, literature).

#### **Inhalation**

Based on available data, the classification criteria are not met.

LC<sub>50</sub> > 2.5 mg/l (aerosol, rat, 6 hrs., no death is observed, literature).

### **Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

Total irritation score = 0 (BASF test).

### **Serious eye damage/irritation**

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Based on available data, the classification criteria are not met.

Total irritation score = 0 (BASF test).

### **Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

Not skin sensitising (guinea pig, maximization test).

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

Negative (OECD 471).

### **Carcinogenicity**

Based on available data, the classification criteria are not met.

NOAEL = 1 000 mg/kg/day (rat, oral, literature).

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.

NOAEL > 1 000 mg/kg/day (rat, oral, generation P0, literature).

NOAEL > 1 000 mg/kg/day (rat, oral, generation F1, literature).

### **STOT – single exposure**

Data for the substance are not available.

### **STOT – repeated exposure**

May cause damage to kidney through prolonged or repeated oral exposure.

NOAEL = 853 mg/kg/day (kidney, rat, oral, 90 days, OECD 408).

### **Aspiration hazard**

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

## **11.2. Information on other hazards**

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet and given in the list (established in accordance with Article 59(1) for having endocrine disrupting properties of REACH regulation.

Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. There is no other relevant information on adverse health effects that is not required according to the classification criteria set out in CLP Regulation.

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

#### **Mixture**

Data for the mixture are not available.

#### **Acute aquatic toxicity**

The mixture is not classified as acute aquatic toxicity based on calculation according to the summation method.

category 1

$\Sigma < 0.15$

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<b>Chronic aquatic toxicity</b>				
The mixture is not classified as chronic aquatic toxicity based on calculation according to the summation method.				
category	1	2	3	4
$\Sigma$	< 0.15	< 1.5	< 25	< 10.0015
<b>Propan-2-ol</b>				CAS: 67-63-0
The substance is not classified as hazardous for the aquatic environment.				
<b>Fish</b>				
LC <sub>50</sub> , 96 hrs., Pimephales promelas: 9 640 - 10 000 mg/l (mortality, OECD 203)				
<b>Crustaceans</b>				
EC <sub>50</sub> , 24 hrs., Daphnia Magna: > 10 000 mg/l (mobility, OECD 202)				
logNOEC, 16 d., Daphnia Magna: 3.37 (growth, NOEC = 2 344 µmol/l = 140.9 mg/l)				
<b>Algae</b>				
Threshold toxicity, 7 d., Scenedesmus quadricauda: 1.800 mg/l				
<b>Alcohols, C12-14, ethoxylated, sulfates, sodium salts</b>				CAS: 68891-38-3
The substance is not classified as hazardous for the aquatic environment.				
<b>Fish</b>				
LC <sub>50</sub> , 96 hrs., Danio rerio: 7.1 mg/l (mortality, OECD 203).				
EC <sub>10</sub> , 28 d., Pimephales promelas: 1.7 mg/l (read-across (Alcohols, C12-14 (linear, even numbering), ethoxylated, sulfates, ammonium salt, < 2.5 mol EO, OECD 210).				
<b>Crustaceans</b>				
EC <sub>50</sub> , 48 hrs., Daphnia Magna: 7.4 mg/l (mobility, OECD 202).				
NOEC, 21 d., Daphnia Magna: ≥ 1.19 mg/l (reproduction, OECD 211).				
<b>Algae</b>				
EC <sub>50</sub> , 72 hrs., Desmodesmus subspicatus: 27.7 mg/l (growth rate, OECD 201).				
EC <sub>10</sub> , 72 hrs., Desmodesmus subspicatus: 4.4 mg/l (growth rate, OECD 201).				
<b>Sulfuric acid, mono-C12-14-alkyl esters, sodium salts</b>				CAS: 85586-07-8
The substance is classified as Aquatic Chronic 3; H412.				
<b>Fish</b>				
LC <sub>50</sub> , 96 hrs., Oncorhynchus mykiss: 3.6 mg/l (mortality, OECD 203).				
NOEC, 96 hrs., Oncorhynchus mykiss: 1.8 mg/l (mortality, OECD 203).				
<b>Crustaceans</b>				
EC <sub>50</sub> , 48 hrs., Daphnia Magna: 4.7 mg/l (mobility).				
NOEC, 48 hrs., Daphnia Magna: 2.5 mg/l (mobility).				
<b>Algae</b>				



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EC<sub>50</sub>, 72 hrs., *Desmodesmus subspicatus*: > 20 mg/l (growth rate, EU method C.3).  
 EC<sub>50</sub>, 72 hrs., *Desmodesmus subspicatus*: 12 mg/l (biomass, , EU method C.3).  
 EC<sub>10</sub>, 72 hrs., *Desmodesmus subspicatus*: 5.4 mg/l (growth rate, , EU method C.3).  
 EC<sub>10</sub>, 72 hrs., *Desmodesmus subspicatus*: 2 mg/l (biomass, , EU method C.3).  
 NOEC, 72 hrs., *Desmodesmus subspicatus*: 0.6 mg/l (biomass, , EU method C.3).

### Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

CAS: 55965-84-9

The substance is classified as Aquatic Acute 1; H400 (M=100) and Aquatic Chronic 1; H410 (M=100).

#### **Fish**

LC<sub>50</sub>, 96 hrs., *Oncorhynchus mykiss*: 0.19 mg/l (mortality, EPA OPP 72-1).  
 NOEC, 35 d., *Brachydanio rerio*: ≥ 46.4 µg/l (mortality, OECD 210).

#### **Crustaceans**

EC<sub>50</sub>, 48 hrs., *Daphnia Magna*: 0.099 mg/l (mobility, OECD 202).  
 NOEC, 21 d., *Daphnia Magna*: 11.1 µg/l (reproduction, OECD 211).

#### **Algae**

EC<sub>50</sub>, 72 hrs., *Skeletonema costatum*: 6.3 µg/l (growth rate, OECD 201).  
 NOEC, 48 hrs., *Skeletonema costatum*: 0.49 µg/l (growth rate, OECD 201).

### Ethanediol

CAS: 107-21-1

The substance is not classified as hazardous for the aquatic environment.

#### **Fish**

LC<sub>50</sub>, 96 hrs., *Pimephales promelas*: > 72 860 mg/l (mortality, literature).  
 NOEC, 7 d., *Pimephales promelas*: 32 000 mg/l (mortality, EPA 600/4-89/001).

#### **Crustaceans**

EC<sub>50</sub>, 48 hrs., *Daphnia Magna*: > 100 mg/l (mobility, OECD 202).  
 NOEC, 21 d., *Daphnia Magna*: 2 mg/l (reproduction, literature).

#### **Algae**

IC<sub>50</sub>, 96 hrs., *Pseudokirchneriella subcapitata*: 10 940 mg/l (number of cells, EPA/600/4-89/001).

## 12.2. Persistence and degradability

### Mixture

Data for the mixture are not available.

### Propan-2-ol

CAS: 67-63-0

Readily biodegradable: 53 % after 5 days (CO<sub>2</sub> evolution, OECD 301 B).

### Alcohols, C12-14, ethoxylated, sulfates, sodium salts

CAS: 68891-38-3

Readily biodegradable: 100 % after 28 days (dissolved organic carbon removal, EU method C.4-C).

### Sulfuric acid, mono-C12-14-alkyl esters, sodium salts

CAS: 85586-07-8

Readily biodegradable: 90 - 100 % after 28 days (O<sub>2</sub> consumption, OECD 301 D).

### Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

CAS: 55965-84-9

Not readily biodegradable: 38.8 % after 29 days (CO<sub>2</sub> evolution, OECD 301 B).



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<b>Ethanediol</b>	CAS: 107-21-1
Readily biodegradable: 90 - 100 % after 10 days (removal of dissolved organic carbon, OECD 301 A).	
<b>12.3. Bioaccumulative potential</b>	
<b>Mixture</b>	
Data for the mixture are not available.	
<b>Propan-2-ol</b>	CAS: 67-63-0
log Pow = 0.05 (25 °C).	
<b>Alcohols, C12-14, ethoxylated, sulfates, sodium salts</b>	CAS: 68891-38-3
log Pow = 0.3 (23 °C, pH = 6.1, OECD 123).	
<b>Sulfuric acid, mono-C12-14-alkyl esters, sodium salts</b>	CAS: 85586-07-8
log Pow ≤ -2.42 (20 °C, calculation).	
<b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b>	CAS: 55965-84-9
BCF, Lepomis macrochirus: 41 - 54 (OECD 305 E). log Pow = 0.326 (2-methyl-2H-isothiazol-3-one, 24 °C, OECD 107). log Pow = 2.519 (5-chloro-2-methyl-2H-isothiazol-3-one, 24 °C, OECD 107).	
<b>Ethanediol</b>	CAS: 107-21-1
log Pow = -1.36 (literature).	
<b>12.4. Mobility in soil</b>	
<b>Mixture</b>	
Data for the mixture are not available.	
<b>Propan-2-ol</b>	CAS: 67-63-0
Data for the substance are not available.	
<b>Alcohols, C12-14, ethoxylated, sulfates, sodium salts</b>	CAS: 68891-38-3
Koc = 2.2 (Q)SAR method.	
<b>Sulfuric acid, mono-C12-14-alkyl esters, sodium salts</b>	CAS: 85586-07-8
log Koc > 3.13 - < 3.19 (25 °C).	
<b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b>	CAS: 55965-84-9
Koc = 6.4 - 10 (pH = 4.7 - 7.4, OECD 106).	
<b>Ethanediol</b>	CAS: 107-21-1
log Koc = 0 l/kg ((Q)SAR method).	
<b>12.5. Results of PBT and vPvB assessment</b>	
Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH Regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation.	

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### 12.6. Endocrine disrupting properties

The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### 12.7. Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### **Disposal methods of the substance or mixture and the contaminated packaging**

Dispose according to the applicable European and local regulations. Do not empty unused product into drainage systems. Do not contaminate ponds or ditches with the product or used container. Do not dispose with municipal waste.

Hand over residual quantities and unregenerate solutions to the collection yard according to the worker's instructions. Empty, cleaned packaging can be stored at a landfill of the appropriate category or **in the sorted waste**.

#### **Possible waste code**

07 06 01\* - aqueous washing liquids and mother liquors or 20 01 29\* - detergents containing hazardous substances (mixture), 15 01 10\* - packaging containing residues of or contaminated by hazardous substances (contaminated packaging), 15 01 02 - plastic packaging (clear packaging).

#### **Physical/chemical properties that may affect waste treatment options**

Flammability.

#### **Special precautions recommended for waste management**

Not known.

#### **Waste legislation**

Directive 2008/98/EC on waste and repealing certain Directives, as amended.

## SECTION 14: Transport information

The mixture is not classified as a flammable liquid according to the negative result of the sustained burning test according to ČSN EN ISO 9038).

### 14.1. UN number or ID number

Not given.

### 14.2. UN proper shipping name

Not given.

### 14.3. Transport hazard class(es)

Not given.

### 14.4. Packing group

Not given.

### 14.5. Environmental hazards

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It is not dangerous for the environment during transport.

### **14.6. Special precautions for user**

Not given.

### **14.7. Maritime transport in bulk according to IMO instruments**

Not available.

## **SECTION 15: Regulatory information**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation No. 1907/2006/EC, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, as amended (REACH)

Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures, as amended (CLP)

Regulation No. 528/2012/EC concerning the making available on the market and use of biocidal products, as amended

Regulation No. 648/2004/EC on detergents, as amended

### **15.2. Chemical safety assessment**

Has not been carried out for mixture.

## **SECTION 16: Other information**

### **Reason for the revision of the safety data sheet**

Change of the classification and labeling of the mixture. Change in section 14.

### **Key or legend to abbreviations and acronyms**

Acute Tox. 2	Acute toxicity, cat. 2
Acute Tox. 3	Acute toxicity, cat. 3
Acute Tox. 4	Acute toxicity, cat. 4
Aquatic Acute 1	Acute aquatic hazard, cat. 1
Aquatic Chronic 1	Chronic aquatic hazard, cat. 1
Aquatic Chronic 3	Chronic aquatic hazard, cat. 3
Eye Dam. 1	Serious eye damage, cat. 1
Eye Irrit. 2	Eye irritation, cat. 2
Flam. Liq. 2	Flammable liquid, cat. 2
Skin Corr. 1C	Skin corrosion, cat. 1C
Skin Irrit. 2	Skin irritation, cat. 2
Skin Sens. 1A	Skin sensitization, cat. 1A
STOT RE 2	Specific target organ toxicity - repeated exposure, cat. 2
STOT SE 3	Specific target organ toxicity - single exposure, cat. 3
ATE	Acute Toxicity Estimate
bw	body weight

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M	Multiplying factor
ADR	Accord Dangereuses Route
CLP	Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures
DNEL	Derived No Effect Level
ICAO/IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent, bioaccumulative, toxic substance
PNEC	Predicted No Effect Concentration
REACH	Regulation No. 1907/2006/EC, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
STOT	Specific target organ toxicity
vPvB	Very persistent and very bioaccumulative substance

### **Sources of key data used to compile the Safety Data Sheet**

European legislation, manufacturer's safety data sheet, registration dossier of substances.

### **List of H- and P- phrases**

EUH071	Corrosive to the respiratory tract.
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
P102	Keep out of reach of children.
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 contents/container by handing it over to a collection yard or sorted waste.

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### **Training advice**

According to SDS.

### **Other information**

Classification according to data from the manufacturer. The mixture is classified using calculation methods according to Regulation CLP and tests. Use only for the purposes designated by the manufacturer, will prevent health and environmental risks.

The information in this safety data sheet has been prepared according to the best available knowledge. The safety data sheet has been compiled in good faith but without guarantee. Various factors may influence properties under specific conditions. It is the responsibility of the product user to assess the accuracy of the information for their specific application. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

The safety data sheet is prepared in accordance with Regulation No. 2020/878/EC. There is no additional information in accordance with the local and national legislation of the Member State in the European Union, in the safety data sheet.

The safety data sheet was prepared by LACHEPRA s.r.o.