

SAFETY DATA SHEET

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

KRYSTAL Dishes lemongrass

Date of revision: 28. 06. 2022

Version: 4.0

Replaced version from: 04. 01. 2022

Date of issue: 19. 05. 2015

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

1.1. Product identifier

Product Name

KRYSTAL Dishes lemongrass

UFI code

UFI: YKH0-G0R0-D00P-GWMX

Product code

Not given.

Mixture description

Water solution.

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

Identified uses

Liquid concentrated cleaning agent intended for hand dishwashing. It excellently degreases all surfaces and is distinguished by a fresh fragrance of lemongrass.

Liquid detergent for hand dishwashing.

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

Tel.: +420 566 550 961

Fax: +420 566 551 822

e-mail address for a competent person responsible for the SDS: 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.

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Classification according to 1272/2008/EC

Eye Dam. 1; H318

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

The most important adverse physical, human health and environmental effects

Causes serious eye damage.

2.2. Label elements

Hazard pictograms



Signal word

Danger.

Substances of the mixture to be placed on the label

Contains Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., Alcohols, C12-14, ethoxylated, sulfates, sodium salts, Alcohols, C12-14, (even numbered) ethoxylated, Sodium hydroxide.

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P102 Keep out of reach of children.
P280 Wear eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Supplemental hazard information

EUH208 - Contains 3-Iodo-2-propynyl butylcarbamate, 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: ≥ 5 - < 15 % anionic surfactants, < 5 % non-ionic surfactants, perfumes, HEXYL CINNAMAL, BUTYLPHENYL METHYLPROPIONAL and preservation agents (BENZYLALCOHOL, BRONOPOL, IODOPROPYNYL BUTYLCARBAMATE, METHYLCHLOROISOTHIAZOLINONE AND METHYLISOTHIAZOLINONE).

2.3. Other hazards

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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

Identification of substance		Content wt. %	Classification according to 1272/2008/EC
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.			
CAS Number	85536-14-7	≤ 6.0	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412
EC Number	287-494-3		
Index Number	not given		
Registration Number	01-2119490234-40-XXXX		
Alcohols, C12-14, ethoxylated, sulfates, sodium salts			
CAS Number	68891-38-3	< 5.0	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412
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 %	
Alcohols, C12-14, (even numbered) ethoxylated			
CAS Number	68439-50-9	< 2.0	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Chronic 3; H412
EC Number	not given		
Index Number	not given		
Registration Number	polymer, not subject to registration		
The substance has specific concentration limits:			
Eye Dam. 1; H318		C ≥ 10 %	
Eye Irrit. 2; H319		5 % < C < 10 %	
Sodium hydroxide; Caustic soda			
CAS Number	1310-73-2	< 1.0	Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318
EC Number	215-185-5		
Index Number	011-002-00-6		
Registration Number	01-2119457892-27-XXXX		
The substance has specific concentration limits:			
Skin Corr. 1A; H314		C ≥ 5 %	
Skin Corr. 1B; H314		2 % ≤ C < 5 %	

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Skin Irrit. 2; H315	0.5 % ≤ C < 2 %
Eye Irrit. 2; H319	0.5 % ≤ C < 2 %
Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol	
CAS Number 52-51-7	Acute Tox. 4; H302
EC Number 200-143-0	Acute Tox. 4; H312
Index Number 603-085-00-8	Skin Irrit. 2; H315
Registration Number 01-2119980938-15-XXXX	Eye Dam. 1; H318
	STOT SE 3; H335
	Aquatic Acute 1; H400
	Aquatic Chronic 2; H411
	M=10
3-Iodo-2-propynyl butylcarbamate; 3-Iodoprop-2-yn-1-yl butylcarbamate	
CAS Number 55406-53-6	Acute Tox. 4; H302
EC Number 259-627-5	Skin Sens. 1; H317
Index Number 616-212-00-7	Eye Dam. 1; H318
Registration Number not given	Acute Tox. 3; H331
	STOT RE 1; H372 (larynx)
	Aquatic Acute 1; H400
	Aquatic Chronic 1; H410
	M=10
	M(Chronic)=1
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
CAS Number 55965-84-9	Acute Tox. 3; H301
EC Number not given	Acute Tox. 2; H310
Index Number 613-167-00-5	Skin Corr. 1C; H314
Registration Number not yet available	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
The substance has specific concentration limits:	
Skin Corr. 1C; H314	C ≥ 0.6 %
Eye Dam. 1; H318	C ≥ 0.6 %
Skin Irrit. 2; H315	0.06 % ≤ C < 0.6 %
Eye Irrit. 2; H319	0.06 % ≤ C < 0.6 %
Skin Sens. 1A; H317	C ≥ 0.0015 %
3.2.2. Substance with a workplace exposure limit	

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Identification of substance	Content wt. %	Classification according to 1272/2008/EC
(2-Methoxymethylethoxy)propanol		
CAS Number 34590-94-8		
EC Number 252-104-2		
Index Number not given	< 0.15	is not classified
Registration Number 01-2119450011-60-XXXX		

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. Seek medical advice.

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 CO₂, 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

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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, bromine oxides, hydrogen bromide, iodine oxides, hydrogen iodide, 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.

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 vapor 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.

Protect from frost.

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

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8.1. Control parameters				
8.1.1. Exposure limit value				
(2-Methoxymethylethoxy)-propanol				CAS: 34590-94-8
Limit values - Eight hours	Limit values - Short-term	Note		
308 mg/m ³ 50 ppm	- mg/m ³ - ppm	skin		
8.1.2. Biological limit values				
Not determined in EU.				
8.1.3. DNEL and PNEC values				
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.				CAS: 85536-14-7
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	7.6 mg/m ³
Workers	Dermal	Systemic effect	Long term	119 mg/kg/day
General population	Inhalation	Systemic effect	Long term	1.3 mg/m ³
General population	Dermal	Systemic effect	Long term	42.5 mg/kg/day
General population	Oral	Systemic effect	Long term	0.425 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.268 mg/l	0.027 mg/l	0.017 mg/l	not given	3.43 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
8.1 mg/l	6.8 mg/kg	no effect	35 mg/kg	no effect
Alcohols, C12-14, ethoxylated, sulfates, sodium salts				CAS: 68891-38-3
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	175 mg/m ³
Workers	Dermal	Systemic effect	Long term	2 750 mg/kg/day
Workers	Dermal	Local effect	Long term	132 µg/cm ²
General population	Inhalation	Systemic effect	Long term	52 mg/m ³
General population	Dermal	Systemic effect	Long term	1 650 mg/kg/day
General population	Dermal	Local effect	Long term	79 µg/cm ²
General population	Oral	Systemic effect	Long term	15 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	

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0.24 mg/l	0.024 mg/l	0.071 mg/l	not given	10 g/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.917 mg/kg	0.092 mg/kg	no effect	7.5 mg/kg	no effect
Sodium hydroxide				CAS: 1310-73-2
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Local effect	Long term	1 mg/m ³
General population	Inhalation	Local effect	Long term	1 mg/m ³
PNEC - not yet available				
Bronopol				CAS: 52-51-7
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	3.5 mg/m ³
Workers	Inhalation	Systemic effect	Acute/short term	10.5 mg/m ³
Workers	Inhalation	Local effect	Long term	2.5 mg/m ³
Workers	Inhalation	Local effect	Acute/short term	2.5 mg/m ³
Workers	Dermal	Systemic effect	Long term	2 mg/kg/day
Workers	Dermal	Systemic effect	Acute/short term	6 mg/kg/day
Workers	Dermal	Local effect	Long term	8 µg/cm ²
Workers	Dermal	Local effect	Acute/short term	8 µg/cm ²
General population	Inhalation	Systemic effect	Long term	0.6 mg/m ³
General population	Inhalation	Systemic effect	Acute/short term	1.8 mg/m ³
General population	Inhalation	Local effect	Long term	0.6 mg/m ³
General population	Inhalation	Local effect	Acute/short term	0.6 mg/m ³
General population	Dermal	Systemic effect	Long term	0.7 mg/kg/day
General population	Dermal	Systemic effect	Acute/short term	2.1 mg/kg/day
General population	Dermal	Local effect	Long term	4 µg/cm ²
General population	Dermal	Local effect	Acute/short term	4 µg/cm ²
General population	Oral	Systemic effect	Long term	0.18 mg/kg/day
General population	Oral	Systemic effect	Acute/short term	0.5 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.01 mg/l	0.001 mg/l	0.003 mg/l	not given	0.43 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators

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0.041 mg/kg	0.003 mg/kg	no effect	0.5 mg/kg	no effect
(2-Methoxymethylethoxy)propanol				CAS: 34590-94-8
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	308 mg/m ³
Workers	Dermal	Systemic effect	Long term	283 mg/kg/day
General population	Inhalation	Systemic effect	Long term	37.2 mg/m ³
General population	Dermal	Systemic effect	Long term	121 mg/kg/day
General population	Oral	Systemic effect	Long term	36 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
19 mg/l	1.9 mg/l	190 mg/l	not given	4 168 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
70.2 mg/l	7.02 mg/kg	no effect	2.74 mg/kg	no effect
8.2. Exposure controls				
8.2.1. Appropriate engineering controls				
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.				
8.2.2. Individual protection measures, such as personal protective equipment				
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.				
Eye/face protection				
Wear safety glasses or face shield.				
Skin protection - hand protection				
Wear protective gloves when manufacturing and handling the product. 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.				
Skin protection - other				
Suitable protective working clothing and footwear.				
Respiratory protection				
Not necessary in case of compliance concentration limits (if they were exceeded, use a respirator against organic vapour). In the event of an accident or a fire use self-contained breathing apparatus.				
Thermal hazards				

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In normal use is not necessary 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

<i>Physical state</i>	Liquid.
<i>Colour</i>	Green.
<i>Odour</i>	Characteristic.
<i>Melting point/freezing point</i>	Not determined.
<i>Boiling point or initial boiling point and boiling range</i>	100 °C
<i>Flammability</i>	Not determined.
<i>Lower explosion limit</i>	Not determined.
<i>Upper explosion limit</i>	Not determined.
<i>Flash point</i>	> 100 °C.
<i>Auto-ignition temperature</i>	Not determined.
<i>Decomposition temperature</i>	Not determined, the mixture does not contain self-reactive substances or organic peroxides or other substances which may decompose.
<i>pH</i>	7.5 (20 °C).
<i>Kinematic viscosity</i>	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. %.
<i>Solubility</i>	Fully miscible.
<i>Partition coefficient n-octanol/water (log value)</i>	Does not apply to mixture.
<i>Vapour pressure</i>	23 hPa
<i>Density and/or relative density</i>	$D_4^{20} = 1.02$.
<i>Relative vapour density</i>	Not determined.
<i>Particle characteristics</i>	Does not apply to liquid.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

CAS: 85536-14-7

<i>Physical state</i>	Liquid.
<i>Colour</i>	Brown.
<i>Odour</i>	Characteristic.
<i>Melting point/freezing point</i>	279.5 K (EU method A.1).
<i>Boiling point or initial boiling point and boiling range</i>	462.2 K (EU method A.2).

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Flammability	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point	196.9 °C (ASTM D93/07).
Auto-ignition temperature	380 °C (ASTM E 659-78).
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined.
Kinematic viscosity	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
Solubility	> 16 g/ 100 g H ₂ O (20 °C, OECD 105).
Partition coefficient n-octanol/water (log value)	log Pow = 2.2 (23 °C, pH = 3.7, OECD 123).
Vapour pressure	1.06 * 10 ⁻⁸ Pa (25 °C, (Q)SAR method).
Density and/or relative density	D ₄ ²⁰ = 1.05 (OECD 109).
Relative vapour density	Not determined.
Particle characteristics	Does not apply to liquid.
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	CAS: 68891-38-3
Physical state	Solid.
Colour	Yellowish.
Odour	Rancid.
Melting point/freezing point	> 300 °C (ASTM E737-76).
Boiling point or initial boiling point and boiling range	Not determined, the substance has a melting point higher than 300 °C.
Flammability	The substance is not classified as flammable solid (EU method A.10)
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	250 °C (EU method A.16)
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined.
Kinematic viscosity	Does not apply to solid.
Solubility	280 g/l (20 °C, pH = 6.8, literature).
Partition coefficient n-octanol/water (log value)	log Pow = 0.3 (23 °C, pH = 6.1, OECD 123).

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Vapour pressure	Not determined, the substance has melting point higher than 300 °C.
Density and/or relative density	1.08 g/cm ³ (22 °C, OECD 109).
Relative vapour density	Does not apply to solid.
Particle characteristics	Not determined.
Sodium hydroxide CAS: 1310-73-2	
Physical state	Solid.
Colour	White.
Odour	Odourless.
Melting point/freezing point	323 °C (literature).
Boiling point or initial boiling point and boiling range	1 388 °C (literature).
Flammability	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	Does not apply to solid.
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined, strong alkaline substance.
Kinematic viscosity	Does not apply to solid.
Solubility	100 g/100 g H ₂ O (25 °C, literature).
Partition coefficient n-octanol/water (log value)	Not determined, it is an inorganic substance.
Vapour pressure	Not determined, the substance has melting point higher than 300 °C.
Density and/or relative density	2.13 g/cm ³ (20 °C, literature).
Relative vapour density	Does not apply to solid.
Particle characteristics	Not determined, solid NaOH is in the form of large particles (flakes).
Bronopol CAS: 52-51-7	
Physical state	Solid.
Colour	White.
Odour	Not determined.
Melting point/freezing point	129 °C (EU method A.1).
Boiling point or initial boiling point and boiling range	Not determined, substance decomposes.

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Flammability	The substance is not classified as flammable (EU method A.10).
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	Does not apply to solid.
Decomposition temperature	ca. 170 °C (EU method A.1).
pH	Not determined.
Kinematic viscosity	Does not apply to solid.
Solubility	268 g/l (20.2 °C, pH = 5, EU method A.6). 286 g/l (20.2 °C, pH = 7, EU method A.6). 298 g/l (20.2 °C, pH = 9, EU method A.6).
Partition coefficient n-octanol/water (log value)	log Pow = 0.21 (24 °C, pH = 5, EU method A.8). log Pow = 0.22 (24 °C, pH = 7, EU method A.8). log Pow = -0.34 (24 °C, pH = 9, EU method A.8).
Vapour pressure	72 mN/m (20 °C, concentration 1 g/l, EU method A.5).
Density and/or relative density	$D_4^{20} = 1.9$ (OECD 109).
Relative vapour density	Does not apply to solid.
Particle characteristics	D50 = 0.25 mm, distribution 3 % (sieving method). D50 = 0.18 mm, distribution 1 % (sieving method).
(2-Methoxymethylethoxy)propanol CAS: 34590-94-8	
Physical state	Liquid.
Colour	Colourless.
Odour	Slight.
Melting point/freezing point	-83 °C (literature).
Boiling point or initial boiling point and boiling range	189.6 °C (EU method A.2).
Flammability	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
Lower explosion limit	1.1 vol. % (EU method A.11).
Upper explosion limit	14 vol. % (EU method A.11).
Flash point	75 °C (ISO 1523).
Auto-ignition temperature	207 °C (EU method A.15).
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined.

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Kinematic viscosity	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
Solubility	Fully miscible.
Partition coefficient n-octanol/water (log value)	log Pow = 0.004 (25 °C, pH = 7.5 - 7.7, OECD 107).
Vapour pressure	10 mm Hg (75.1 °C, literature). 760 mm Hg (189.6 °C, literature).
Density and/or relative density	0.9539 g/cm ³ (20 °C, DIN 51747). 0.9497 g/cm ³ (25 °C, DIN 51747).
Relative vapour density	Not determined.
Particle characteristics	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

Data for the mixture are not available.

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

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

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.

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<i>Pyrophoric solids</i>	
It is not solid.	
<i>Self-heating substances and mixtures</i>	
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.	
<i>Substances and mixtures, which emit flammable gases in contact with water</i>	
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.	
<i>Oxidising liquids</i>	
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.	
<i>Oxidizing solids</i>	
It is not solid.	
<i>Organic peroxides</i>	
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.	
<i>Corrosive to metals</i>	
Data for the mixture are not available. The mixture is not classified as corrosive to metals due to its low sodium hydroxide content.	
<i>Desensitised explosives</i>	
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.	
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS: 85536-14-7
<i>Explosives</i>	
Data for the substance are not available. The substance does not contain chemical groups associated with explosive properties.	
<i>Flammable gases</i>	
It is not gas.	
<i>Aerosols</i>	
It is not aerosol.	
<i>Oxidising gases</i>	
It is not gas.	
<i>Gases under pressure</i>	
It is not gas.	
<i>Flammable liquids</i>	

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The substance is classified as flammable liquid category 3 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 is not classified as self-reactive.

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.

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

CAS: 68891-38-3

Explosives

Data for the substance are not available.
The substance does not contain chemical groups associated with explosive properties.

Flammable gases

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KRYSTAL Dishes lemongrass

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 > 2 400 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 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

It is not liquid.

Oxidizing solids

Data for the substance are not available.

It is an organic substance does not contain chemical groups associated with oxidising properties.

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

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Data for the substance are not available.

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

Sodium hydroxide

CAS: 1310-73-2

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

Data for the substance are not available.

The substance is not classified as flammable 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

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.

Oxidising liquids

It is not liquid.

Oxidising solids

Data for the substance are not available.

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

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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 classified as corrosive to metal category 1.

Desensitised explosives

Data for the substance are not available.

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

Bronopol

CAS: 52-51-7

Explosives

The substance contains chemical groups associated with explosive properties.

Calculated oxygen balance = - 40.

The substance is not classified as explosive of division 1.1 (EU method A.14).

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

It is not solid.

Self-reactive substances and mixtures

Data for the substance are not available.

The substance is not classified as self-reactive.

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

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KRYSTAL Dishes lemongrass

Data for the substance are not available.

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

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

Oxidising liquids

It is not liquid.

Oxidizing solids

The substance is not classified as oxidizing solid (EU method A.17).

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.

(2-Methoxymethylethoxy)propanol

CAS: 34590-94-8

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

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

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KRYSTAL Dishes lemongrass

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

SECTION 10: Stability and reactivity

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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 frost.

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, bromine oxides, hydrogen bromide, iodine oxides, hydrogen iodide, 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.

The mixture is not classified by the additive formula.

ATE_{mixture} > 12 236 mg/kg.

Dermal

Data for the mixture are not available.

ATE_{mixture} > 2 000 mg/kg (estimate, low concentration of substance classified as toxic dermal route of exposure).

Inhalation

Data for the mixture are not available.

ATE_{mixture} > 20 mg/kg (estimate, low concentration of substances classified as toxic inhalation route of exposure).

Skin corrosion/irritation

The mixture is not classified as irritating to the skin according to the test.

Primary dermal index PDI = 0 (Open epicutaneous test).

Serious eye damage/irritation

Data for the mixture are not available.

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

Respiratory or skin sensitisation

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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).

EUH208 - Contains 3-Iodo-2-propynyl butylcarbamate, 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 is not classified as toxic for specific target organs in a repeated exposure according to the general/specific concentration limits of substance(s).

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.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

CAS: 85536-14-7

Acute toxicity

Oral The substance is classified in category 4.
LD₅₀ = ca. 1 470 mg/kg (rat, OECD 401).

Dermal Based on available data, the classification criteria are not met.
LD₅₀ > 2 000 mg/kg (rabbit, OECD 402).

Inhalation Data for the substance are not available.

Skin corrosion/irritation

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

Primary dermal irritation index PDII = 5.25 (max. 6, not reversible); 5.33 (max. 8, not reversible) (rabbit, 72 h, OECD 404).

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KRYSTAL Dishes lemongrass

Serious eye damage/irritation

The substance is classified as seriously damaging to the eyes.
Overall irritation score = 46.9 (not fully reversible after 6 days) (rabbit, 72 h, 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.
In vitro:
Negative (OECD 471).
Positive (OECD 473).
In vivo:
Negative (OECD 474, mammalian germ cell cytogenetic assay, rodent dominant lethal assay).

Carcinogenicity

Data for the substance are not available.

Reproductive toxicity

Based on available data, the classification criteria are not met.
NOAEL = 350 mg/kg/ day (rat, oral, generation P0).
NOAEL = 350 mg/kg/ day (rat, oral, generation F1).
NOAEL = 350 mg/kg/ day (rat, oral, generation F2).

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

Based on available data, the classification criteria are not met.
NOAEL = 85 mg/kg/day (liver and kidney, rat, oral).
LOAEL = 300 mg/kg/ day (liver and kidney, rat, oral).
NOAEL = 5 % (rat, dermal).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm²/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.
LD₅₀ = 4 100 mg/kg (rat, OECD 401).

Dermal Based on available data, the classification criteria are not met.
LD₅₀ > 2 000 mg/kg (rabbit, OECD 402).

Inhalation Data for the substance are not available.

Skin corrosion/irritation

The substance is classified as skin irritant.
Mean erythema score = 3.2 and oedema = 3.2 (fully reversible) (rabbit, 72 hrs., OECD 404).

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KRYSTAL Dishes lemongrass

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 mm²/s or less at 40 °C.

Sodium hydroxide

CAS: 1310-73-2

Acute toxicity

Oral Data for the substance are not available.

Dermal Data for the substance are not available.

Inhalation Data for the substance are not available.

Skin corrosion/irritation

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Substance is classified as skin corrosive category 1A.

Irritating to the skin at a concentration of 0.95 % by weight - intact skin - mean erythema score = 2 after 24 hours, 1.7 after 72 hours, 0.7 after 8 days (irreversible for 1/6 animals, scale on the skin) and edema = 0.3 after 24 h, 0 after 72 h, 0 after 8 d (fully reversible in 72 h), broken skin - mean erythema score = 2.3 after 24 h, 2 after 72 h, 2.7 after 8 d (irreversible for 1/6 animals, skin necrosis) and edema = 2 after 24 h, 0.3 after 72 h, 0 after 8 d (fully reversible in 8 days), primary dermal irritation index PDII = 2.7 (rabbit, Draize test).

Corrosive skin at a concentration of 4.98% by weight - intact skin - mean erythema score = 4 after 24 h, 4 after 72 h, 4 after 8 d (irreversible, skin necrosis) and edema = 2 after 24 h, 1 after 72 h, 1 after 8 days (irreversible for 8 days), broken skin - mean erythema score = 4 after 24 h, 4 after 72 h, 4 after 8 d (irreversible, skin necrosis) and edema = 2 after 24 h, after 72 hours, 1 after 8 days (irreversible for 8 days), primary dermal irritation index PDII = 5.6 (rabbit, Draize test).

Serious eye damage/irritation

Substance is classified as serious eye damage.

Mean corneal opacity > 2, conjunctival redness > 2.5 (2 wt.%, rabbit, 72 h, OECD 405).

Respiratory or skin sensitization

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

Not skin sensitising (human).

Germ cell mutagenicity

Data for the substance are not available.

Carcinogenicity

Data for the substance are not available.

Reproductive toxicity

Data for the substance are not available.

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

Data for the substance are not available.

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm²/s or less at 40 °C.

Bronopol

CAS: 52-51-7

Acute toxicity

Oral The substance is classified in category 4.
LD₅₀ = 305 mg/kg (rat, OECD 423).

Dermal Based on available data, the classification criteria are not met.
LD₅₀ > 2 000 mg/kg (rabbit, OECD 402).
ATE = 1 100 mg/kg (for calculation by additive formula).

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KRYSTAL Dishes lemongrass

Inhalation

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

LC₅₀ ≥ 0.588 mg/l (rat, aerosol, 4 hrs., of the high dose group (0.588 mg/l) one male animal was found dead on the day following exposure; and 2 more animals (one male and one female) were killed for humane reasons because they suffered from inflammation of the eyes. The authors attribute the deaths of 3 animals at this level only to the local irritancy of bronopol. However, symptoms of local irritation only occurred at concentrations causing lethality. Thus, acute inhalation toxicity is the predominant effect. No deaths occurred in the control groups or at concentrations of 0.038 or 0.089 mg/l.).

Skin corrosion/irritation

The substance is classified as skin irritant.

Primary dermal irritation index PDII = 6.2 (not fully reversible after 72 hours) (rabbit, 72 h, OECD 404).

Serious eye damage/irritation

The substance is classified as seriously damaging to the eyes.

Mean score of conjunctival redness = 1.6, conjunctival oedema = 1.0 (fully reversible after 7 days, 5% bronopol, rabbit, 72 h).

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.

In vitro:

Negative (bacterial reverse mutation assay, mammalian cell gene mutation assay).

Positive (mammalian chromosome aberration test).

In vivo:

Negative (OECD 474, OECD 486, rodent dominant lethal assay).

Carcinogenicity

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

NOEL = 7 mg/kg/day (carcinogenicity, rat, oral).

Reproductive toxicity

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

NOAEL = 70 mg/kg/day (rat, oral, generation P0, two-generation test).

NOAEL = 200 mg/kg/day (rat, oral, generation F1, two-generation test).

NOAEL = 200 mg/kg/day (rat, oral, generation F2, two-generation test).

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

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

NOAEL = 7 mg/kg/day (rat, oral, 104 weeks).

LOAEL = 32 mg/kg/day (rat, oral, 104 weeks).

NOAEL = 0.2% acetone solution (mouse, dermal, 80 weeks).

LOAEL = 0.5% acetone solution (mouse, dermal, 80 weeks).

Aspiration hazard

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The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm²/s or less at 40 °C.

(2-Methoxymethylethoxy)propanol

CAS: 34590-94-8

Acute toxicity

Oral Based on available data, the classification criteria are not met.
LD₅₀ > 5 000 mg/kg (rat, OECD 401).

Dermal Based on available data, the classification criteria are not met.
LD₅₀ > 19 020 mg/kg (rat, OECD 402).
LD₅₀ = 9 510 mg/kg (rabbit, male, OECD 402).

Inhalation Based on available data, the classification criteria are not met.
LC₀ > 275 ppm (rat, vapour, 7 hrs., OECD 403)

Skin corrosion/irritation

Based on available data, the classification criteria are not met.
Mean erythema score = 0 and oedema = 0 (rabbit, 5 d., OECD 404).

Serious eye damage/irritation

Based on available data, the classification criteria are not met.
Total irritation score = 0 (human).

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.
Not skin sensitising (human).

Germ cell mutagenicity

Based on available data, the classification criteria are not met.
Negative (OECD 471, OECD 473, OECD 481).

Carcinogenicity

Data for the substance are not available.

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.
NOEL = 200 mg/kg/day (overall effects, rat, oral).
NOEL = 1 000 mg/kg/day (tentative salivation, increased relative liver weight accompanied by centrilobular hypertrophy, rat, oral).
NOAEL = 2 850 mg/kg/day (rabbit, dermal, 90 days, OECD 411).
NOAEC = 200 ppm (overall effects, rat, inhalation, vapour, 90 days, OECD 413).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm²/s or less at 40 °C.

11.2. Information on other hazards

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KRYSTAL Dishes lemongrass

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

$\Sigma < 0.35$

Chronic aquatic toxicity

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

Sum of concentration	EqNOEC _m	Classification	M-factor	
11.03 wt. %	0.17087 mg/l	Aquatic Chronic 3; H412	not relevant	
category	1	2	3	4
Σ	< 0.05	< 0.5	< 18.03	< 13.0305

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

CAS: 85536-14-7

The substance is classified as Aquatic Chronic 3; H412.

Fish

LC₅₀, 96 hrs., Pimephales promelas: 1.67 mg/l (mortality, USEPA 850.1075).

NOEC, 72 d., Oncorhynchus mykiss: 0.23 mg/l (read-across (sodium 4-undecylbenzenesulfonate), mortality, OECD 210).

Crustaceans

EC₅₀, 48 hrs., Daphnia Magna: 2.9 mg/l (read-across (sodium 4-undecylbenzenesulfonate), mobility, OECD 202).

NOEC, 21 d., Daphnia Magna: 1.18 mg/l (read-across (sodium 4-undecylbenzenesulfonate), OECD 211).

Algae

EC₅₀, 72 hrs, Pseudokirchneriella subcapitata: 235 mg/l (read-across (sodium 4-undecylbenzenesulfonate), growth rate, OECD 201).

NOEC, 72 hrs, Pseudokirchneriella subcapitata: 13.1 mg/l (read-across (sodium 4-undecylbenzenesulfonate), growth rate, OECD 201).

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

CAS: 68891-38-3

The substance is classified as Aquatic Chronic 3; H412.

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Fish	
LC ₅₀ , 96 hrs., Danio rerio: 7.1 mg/l (mortality, OECD 203). NOEC, 28 d., Oncorhynchus mykiss: 0.14 mg/l (mortality and sublethal effects, OECD 204).	
Crustaceans	
EC ₅₀ , 48 hrs., Daphnia Magna: 7.4 mg/l (mobility, OECD 202). NOEC, 21 d., Daphnia Magna: 0.27 mg/l (survival and reproduction, OECD 211).	
Algae	
EC ₅₀ , 72 hrs., Desmodesmus subspicatus: 27.7 mg/l (growth rate, OECD 201). EC ₁₀ , 72 hrs., Desmodesmus subspicatus: 4.4 mg/l (growth rate, OECD 201). NOEC, 72 hrs., Desmodesmus subspicatus: 0.95 mg/l (growth rate, OECD 201).	
Sodium hydroxide	CAS: 1310-73-2
The substance is not classified as dangerous for the aquatic environment.	
Fish	
LC ₅₀ , 48 hrs, Leuciscus idus: 189 mg/l (mortality).	
Crustaceans	
EC ₅₀ , 48 hrs, Ceriodaphnia sp.: 40.4 mg/l (immobility).	
Algae	
Data for the substance are not available.	
Bronopol	CAS: 52-51-7
The substance is classified as Aquatic Acute 1; H400 (M = 10) and Aquatic Chronic 2; H411.	
Fish	
LC ₅₀ , 96 hrs., Lepomis macrochirus: 35.7 mg/l (mortality, EPA OPP 72-1). NOEC, 49 d., Oncorhynchus mykiss: 21.5 mg/l (mortality, OECD 210).	
Crustaceans	
EC ₅₀ , 48 hrs., Daphnia Magna: 1.4 mg/l (mobility, OECD 202). NOEC, 21 d., Daphnia Magna: 0.27 mg/l (OECD 211).	
Algae	
EC ₅₀ , 72 hrs., Pseudokirchneriella subcapitata: 0.37 mg/l (growth rate, OECD 201). EC ₅₀ , 72 hrs., Pseudokirchneriella subcapitata: 0.16 mg/l (biomass, OECD 201). NOEC, 72 hrs., Pseudokirchneriella subcapitata: 0.1 mg/l (growth rate, OECD 201). NOEC, 72 hrs., Pseudokirchneriella subcapitata: 0.1 mg/l (biomass, OECD 201). NOEC, 72 hrs., Skeletonema costatum: 0.08 mg/l (growth rate, OECD 201).	
3-Iodo-2-propynyl butylcarbamate	CAS: 55406-53-6
The substance is classified as Aquatic Acute 1; H400 (M = 10) and Aquatic Chronic 1; H410 (M=1).	
Fish	
LC ₅₀ , 96 hrs., Oncorhynchus mykiss: 0.145 mg/l (OECD 203). NOEC, 28 d., Pimephales promelas: 0.014 mg/l (OECD 210).	
Crustaceans	

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EC₅₀, 48 hrs., Daphnia Magna: 0.47 mg/l (OECD 202).

NOEC, 21 d., Daphnia Magna: 0.01 mg/l (OECD 211).

Algae

EC₅₀, 72 hrs., Pseudokirchneriella subcapitata: 0.049 mg/l (OECD 201).

NOEC, 72 hrs., Pseudokirchneriella subcapitata: 0.013 mg/l (OECD 201).

NOEC, 72 hrs., Skeletonema costatum: 0.004 mg/l (OECD 201).

(2-Methoxymethylethoxy)propanol

CAS: 34590-94-8

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

Fish

LC₅₀, 96 hrs., Poecilia reticulata: > 1 000 mg/l (mortality, OECD 203).

Crustaceans

LC₅₀, 48 hrs., Daphnia Magna: 1 919 mg/l (mortality, OECD 202).

Algae

EC₅₀, 72 hrs., Pseudokirchnerella subcapitata: 969 mg/l (growth rate, OECD 201).

EC₅₀, 72 hrs., Pseudokirchnerella subcapitata: 969 mg/l (biomass, OECD 201).

NOEC, 72 hrs., Pseudokirchnerella subcapitata: > 969 mg/l (growth rate, OECD 201).

NOEC, 72 hrs., Pseudokirchnerella subcapitata: > 969 mg/l (biomass, OECD 201).

12.2. Persistence and degradability

Mixture

Data for the mixture are not available.

The surfactants are contained in this preparation in accordance with the biodegradability criteria according to Regulation (EC) No. 648/2004 on detergents.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

CAS: 85536-14-7

Readily biodegradable: 94 % after 28 days (removal of dissolved organic carbon, OECD 301 A).

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).

Sodium hydroxide

CAS: 1310-73-2

Not determined, it is an inorganic substance.

Bronopol

CAS: 52-51-7

Readily biodegradable: 70 - 80 % after 28 days (CO₂ evolution, OECD 301 B).

3-Iodo-2-propynyl butylcarbamate

CAS: 55406-53-6

Readily biodegradable (OECD 308).

(2-Methoxymethylethoxy)propanol

CAS: 34590-94-8

Readily biodegradable: 76 % after 28 days (CO₂ evolution, OECD 301 F).

12.3. Bioaccumulative potential

Mixture

Data for the mixture are not available.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

CAS: 85536-14-7

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log Pow = 2.2 (23 °C, pH = 3.7, OECD 123).	
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	CAS: 68891-38-3
log Pow = 0.3 (23 °C, pH = 6.1, OECD 123).	
Sodium hydroxide	CAS: 1310-73-2
Not determined, it is an inorganic substance.	
Bronopol	CAS: 52-51-7
log Pow = 0.21 (24 °C, pH = 5, EU method A.8). log Pow = 0.22 (24 °C, pH = 7, EU method A.8). log Pow = -0.34 (24 °C, pH = 9, EU method A.8).	
(2-Methoxymethylethoxy)propanol	CAS: 34590-94-8
log Pow = 0.004 (25 °C, pH = 7.5 -7.7, OECD 107).	
12.4. Mobility in soil	
Mixture	
Data for the mixture are not available.	
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS: 85536-14-7
Not determined.	
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	CAS: 68891-38-3
Koc = 2.2 (Q)SAR method.	
Sodium hydroxide	CAS: 1310-73-2
Not determined, it is an inorganic substance.	
Bronopol	CAS: 52-51-7
Koc = 5 (calculation).	
(2-Methoxymethylethoxy)propanol	CAS: 34590-94-8
Data for the substance are not available.	
12.5. Results of PBT and vPvB assessment	
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.	
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	

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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 (eg. in a hazardous waste incinerator). **Do not empty unused product into drainage systems.** Do not contaminate ponds or ditches with the product or used container. Hand over the residual amounts and solutions to a licensed disposal company. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Possible waste code

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

Not known.

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

This product is not classified as a dangerous for transportation (ADR/RID, IMDG, ICAO/IATA).

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

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

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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. 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

Revision of all sections according to Commission Regulation (EU) 2020/878/EC. Change of the classification and labeling of the mixture. Change in the composition of the mixture in section 3 and related changes in the other sections. The values in sections 8, 9, 11 and 12 are added according to the registration dossier of compounds.

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 2	Chronic aquatic hazard, cat. 2
Aquatic Chronic 3	Chronic aquatic hazard, cat. 3
Eye Dam. 1	Serious eye damage, cat. 1
Eye Irrit. 2	Eye irritation, cat. 2
Met. Corr. 1	Substance or mixture corrosive to metals, cat. 1
Skin Corr. 1A	Skin corrosion, cat. 1A
Skin Corr. 1B	Skin corrosion, cat. 1B
Skin Corr. 1C	Skin corrosion, cat. 1C
Skin Irrit. 2	Skin irritation, cat. 2
Skin Sens. 1A	Skin sensitization, cat. 1A
Skin Sens. 1	Skin sensitization, cat. 1
STOT RE 1	Specific target organ toxicity - repeated exposure, cat. 1
STOT SE 3	Specific target organ toxicity - single exposure, cat. 3
M	Multiplying factor
ADR	Accord Dangereuses Route
ATE	Acute Toxicity Estimate
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

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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.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H312	Harmful 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.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
P102	Keep out of reach of children.
P280	Wear eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Training advice

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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 SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. 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 created 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 created by company LACHEPRA s.r.o.