

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Date of revision: **12. 11. 2024**

Version: **2.0**

Replaced version from: **26. 11. 2021**

Date of issue: **26. 11. 2021**

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

1.1. Product identifier

Product Name

KRYSTAL Soap detergent

UFI code

UFI: EFV0-90JH-W000-RW5M

Product code

Not given.

Mixture description

Water solution.

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

Identified uses

Cleaner.

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.

Classification according to 1272/2008/EC

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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 Alcohols, C12-14, ethoxylated, sulfates, sodium salts, 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 acyl derivs., inner salts, Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl).

Hazard statements

H318 Causes serious eye damage.

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.

P310 Immediately call a POISON CENTER/doctor.

P501 **Dispose of contents/container by handing it over to a collection yard or sorted waste.**

Supplemental hazard information

EUH208 - 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: < 5 % anionic surfactants, amphoteric surfactants, non-ionic surfactants, perfumes, HEXYL CINNAMAL, LINALOOL, LIMONENE, CITRONELLOL, COUMARIN, EUGENOL, 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.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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
Alcohols, C12-14, ethoxylated, sulfates, sodium salts		
CAS Number		
EC Number	68891-38-3	
Index Number	500-234-8	
Registration Number	not given	1 - < 5
	01-2119488639-16-XXXX	
The substance has specific concentration limits:		
Eye Dam. 1; H318	$C \geq 10 \%$	
Eye Irrit. 2; H319	$5 \% \leq C < 10 \%$	
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 acyl derivs., inner salts		
CAS Number		
EC Number	97862-59-4	
Index Number	931-296-8	
Registration Number	not given	1 - < 5
	01-2119488533-30-XXXX	
The substance has specific concentration limits:		
Eye Dam. 1; H318	$C > 10 \%$	
Eye Irrit. 2; H319	$4 \% < C \leq 10 \%$	
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl); C8-18 and C18-unsatd. DEA		
CAS Number		
EC Number	68155-07-7	
Index Number	931-329-6	
Registration Number	not given	1 - < 3
	01-2119490100-53-XXXX	
< 3 % free diethanolamine (DEA)		
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)		

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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 _{oral} = 66 mg/kg bw
			ATE _{dermal} = 87 mg/kg bw
			ATE _{inhalation} = 0.17 mg/L (aerosol)
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 %	

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 _{oral} = 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. Seek medical advice.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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

The product is non-flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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.

6.4. Reference to other sections

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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

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 ³	20 ppm	104 mg/m ³	40 ppm	Skin	

8.1.2. Biological limit values

Not determined in EU.

8.1.3. DNEL and PNEC values

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	411 mg/m ³	
Workers	Dermal	Systemic effect	Long term	5 830 mg/kg/day	
General population	Inhalation	Systemic effect	Long term	87.1 mg/m ³	
General population	Dermal	Systemic effect	Long term	2 500 mg/kg/day	
General population	Oral	Systemic effect	Long term	25 mg/kg/day	
PNEC					
Fresh water		Marine water		Intermittent releases	
0.129 mg/l		0.013 mg/l		Fresh water	Marine water
				0.71 mg/l	0.071 mg/l
					10 g/l

PNEC

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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
1-Propanaminium, derivs., inner salts	3-amino-N-(carboxymethyl)-N,N-dimethyl-, acyl	N-C8-18		CAS: 97862-59-4
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	44 mg/m ³
Workers	Dermal	Systemic effect	Long term	12.5 mg/kg/day
General population	Inhalation	Systemic effect	Long term	13.04 mg/m ³
General population	Dermal	Systemic effect	Long term	7.5 mg/kg/day
General population	Oral	Systemic effect	Long term	7.5 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
0.013 mg/l	0.001 mg/l	Fresh water	Marine water	
		not given	not given	3 000 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
11.1 mg/kg	1.11 mg/kg	no effect	0.85 mg/kg	no effect
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)				CAS: 68155-07-7
DNEL				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	11.5 mg/m ³
Workers	Dermal	Systemic effect	Long term	0.75 mg/kg/day
General population	Inhalation	Systemic effect	Long term	2.03 mg/m ³
General population	Dermal	Systemic effect	Long term	89.3 µg/kg/day
General population	Oral	Systemic effect	Long term	1.17 mg/kg/day
PNEC				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
7 µg/l	0.7 µg/l	Fresh water	Marine water	
		24 µg/l	2.4 µg/l	830 mg/l
PNEC				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.23 mg/kg	23 µg/kg	no effect	32 mg/kg	no effect
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				CAS: 55965-84-9

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	0.02 mg/m ³
Workers	Inhalation	Local effect	Long term	0.04 mg/m ³
General population	Inhalation	Systemic effect	Long term	0.02 mg/m ³
General population	Inhalation	Local effect	Long term	0.04 mg/m ³
General population	Oral	Systemic effect	Long term	0.09 mg/kg/day
General population	Oral	Local effect	Long term	0.11 mg/kg/day

PNEC

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

PNEC

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

Ethanediol

CAS: 107-21-1

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Local effect	Long term	35 mg/m ³
Workers	Dermal	Systemic effect	Long term	106 mg/kg/day
General population	Inhalation	Local effect	Long term	7 mg/m ³
General population	Dermal	Systemic effect	Long term	53 mg/kg/day

PNEC - not yet available

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 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.

Skin protection - hand protection

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.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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 protective 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 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

Physical state	Liquid.
Colour	Orange.
Odour	Characteristic.
Melting point/freezing point	Not determined.
Boiling point or initial boiling point and boiling range	100 °C
Flammability	Not determined.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point	Not determined.
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined, the mixture does not contain self-reactive substances or organic peroxides or other substances which may decompose.
pH	8 (20 °C).
Kinematic viscosity	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. %.
Solubility	Fully miscible.
Partition coefficient n-octanol/water (log value)	Does not apply to mixture.
Vapour pressure	23 hPa

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Density and/or relative density	1.0 g/cm ³ (20 °C).
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).
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.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, derivs., inner salts	N-C8-18 acyl CAS: 97862-59-4
Physical state	Solid.
Colour	Not determined.
Odour	Not determined.
Melting point/freezing point	Not determined, substance decomposes.
Boiling point or initial boiling point and boiling range	Not determined, substance decomposes.
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.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Flash point	Does not apply to solid.
Auto-ignition temperature	Does not apply to solid.
Decomposition temperature	208 - 280 °C (OECD 102).
pH	Not determined.
Kinematic viscosity	Does not apply to solid.
Solubility	≤ 400 mg/l (20 °C, literature)
Partition coefficient n-octanol/water (log value)	log Pow = 1.79 (pH = 3 - 8, 20 °C, C8 derivates, (Q)SAR method). log Pow = 2.81 (pH = 3 - 8, 20 °C, C10 derivates, (Q)SAR method). log Pow = 3.54 (pH = 3 - 8, 20 °C, C12 derivates, (Q)SAR method). log Pow = 5.13 (pH = 3 - 8, 20 °C, C14 derivates, (Q)SAR method). log Pow = 6.15 (pH = 3 - 8, 20 °C, C16 derivates, (Q)SAR method). log Pow = 7.17 (pH = 3 - 8, 20 °C, C18 derivates, (Q)SAR method).
Vapour pressure	Not determined.
Density and/or relative density	1.15 g/cm ³ (20 °C, ISO 1183-1).
Relative vapour density	Does not apply to solid.
Particle characteristics	Not determined.
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	CAS: 68155-07-7
Physical state	Liquid.
Colour	Yellow.
Odour	Slight.
Melting point/freezing point	> -10 - < -7 °C (ASTM D87-87).
Boiling point or initial boiling point and boiling range	Not determined, substance decomposes.
Flammability	Not determined.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point	ca. 188 °C (EU method A.9).
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined.
pH	Not determined.
Kinematic viscosity	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
Solubility	15 - 30 mg/l (calculation).
Partition coefficient n-octanol/water (log value)	log Pow = ca. 1.35 - ≤ 4.84 (20 °C, pH = ca. 5.5, OECD 117).

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Vapour pressure	0 Pa (20 - 25 °C, OECD 104).
Density and/or relative density	D_4^{20} = ca. 0.985 (OECD 109).
Relative vapour density	Not determined.
Particle characteristics	Does not apply to liquid.
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS: 55965-84-9
Physical state	Liquid.
Colour	Light yellow.
Odour	Not determined.
Melting point/freezing point	< -25 °C (OECD 102).
Boiling point or initial boiling point and boiling range	100.1 °C (OECD 103).
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	> 110 °C (EU method A.9).
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	3.43 (20 °C, 10 g/l, CIPAC MT 75).
Kinematic viscosity	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
Solubility	> 1 000 g/l (20 °C, pH = 5 - 9, OECD 105).
Partition coefficient n-octanol/water (log value)	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).
Vapour pressure	0.003 Pa (25 °C, OECD 104).
Density and/or relative density	D_4^{20} = 1.294 (OECD 109).
Relative vapour density	Not determined.
Particle characteristics	Does not apply to liquid.
Ethanediol	CAS: 107-21-1
Physical state	Liquid.
Colour	Colourless.
Odour	Odourless.
Melting point/freezing point	-12.69 °C (literature).
Boiling point or initial boiling point and boiling	197.4 °C (literature).

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

range

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

115 °C (literature).

Auto-ignition temperature

412 °C (literature).

Decomposition temperature

Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.

pH

Kinematic viscosity

Not determined.

Solubility

Miscible.

Partition coefficient n-octanol/water (log value)

log Pow = -1.36 (literature).

Vapour pressure

100 Pa (51.1 °C, literature).

1 kPa (86.1 °C, literature).

10 kPa (132.5 °C, literature).

100 kPa (196.9 °C, literature).

Density and/or relative density

1.11 g/cm³ (DIN 51557).

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

The mixture does not contain relevant substances classified as hazardous to the physical classes, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

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

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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

Data for the substance are not available.

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

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 acyl CAS: 97862-59-4
derivs., inner salts

Explosives

Data for the substance are not available.

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

Flammable gases

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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

Burning time = 510 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 soluble in 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 that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

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

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Data for the substance are not available.

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

Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

CAS: 68155-07-7

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.

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.

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.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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.

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

CAS: 55965-84-9

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 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

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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.

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

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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 explosive 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.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Photocatalytic properties

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.

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.

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

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).

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

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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).

EUH208 - 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 does not contain substances classified as toxic for specific target organs in a single exposure or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

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.

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

CAS: 68891-38-3

Acute toxicity

Oral Based on available data, the classification criteria are not met.
 $LD_{50} = 4\ 100\ mg/kg\ bw$ (rat, OECD 401).

Dermal Based on available data, the classification criteria are not met.
 $LD_{50} > 2\ 000\ mg/kg\ bw$ (rabbit, OECD 402).

Inhalation Data for the substance are not available.

Skin corrosion/irritation

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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 mm²/s or less at 40 °C.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 acyl CAS: 97862-59-4
derivs., inner salts

Acute toxicity

Oral Based on available data, the classification criteria are not met.
LD₅₀ = 2 335 mg/kg bw (rat, OECD 401).

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

Inhalation Data for the substance are not available.

Skin corrosion/irritation

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

Mean erythema score = 0.33; 1.67; 0.33 (fully reversible after 72 hours) and oedema = 0.33; 0.33; 0 (fully reversible after 48 hours) (rabbit, OECD 404).

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Serious eye damage/irritation

The substance is classified as seriously damaging to the eyes.

Mean score of corneal opacity = 1.33 (not fully reversible after 21 days), iritis = 1 (not fully reversible after 21 days), conjunctival redness = 3 (not fully reversible after 21 days), conjunctival oedema = 1.1 (fully reversible after 17 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, OECD 406).

Germ cell mutagenicity

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

Negative (OECD 476, EU method B13/14).

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 = 300 mg/kg/day (systemic effect, rat, oral, 90 days, OECD 408).

NOEL = 75 mg/kg/day (local effect, local irritative effects at the side of application (forestomach gastritis), judged as not relevant to humans due to significant different anatomic situation and exposure probability in humans, rat, oral, 90 days, OECD 408).

LOEL = 150 mg/kg/day (local effect, local irritative effects at the side of application (forestomach gastritis), judged as not relevant to humans due to significant different anatomic situation and exposure probability in humans, 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.

Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

CAS: 68155-07-7

Acute toxicity

Oral Based on available data, the classification criteria are not met.
LD₅₀ > 2 000 mg/kg bw (rat, OECD 401).

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

Inhalation Data for the substance are not available.

Skin corrosion/irritation

The substance is classified as skin irritant (read-across (CAS 90622-74-5), rabbit, 72 h, OECD 404).

Serious eye damage/irritation

The substance is classified as seriously damaging to the eyes read-across (CAS 90622-74-5), rabbit, 72 h, OECD 405).

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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).

Carcinogenicity

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

NOAEL > 100 mg/kg/day (rat, dermal).

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 > 700 mg/kg/day (read-across (CAS 90622-74-5), rat, oral, 28 days, OECD 407).

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.

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.

LD₅₀ = 66 mg/kg bw (rat, OECD 401).

Dermal The substance is classified in category 2.

LD₅₀ = 87 mg/kg bw (rat, OECD literature).

Inhalation The substance is classified in category 2.

LC₅₀ = 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

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).

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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 mm²/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.

LD₅₀ = 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.

LD₅₀ > 3 500 mg/kg bw (mouse, literature).

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

LC₅₀ > 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

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

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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 mm²/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

$\sum < 0.15$

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

< 8.0015 wt. %

0.175 mg/l (fish)
0.136 mg/l (crustaceans)

Aquatic Chronic 3; H412

not relevant

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

0.547 mg/l (algae)				
category	1	2	3	4
Σ	0	0	< 8.0015	< 8.0015
Alcohols, C12-14, ethoxylated, sulfates, sodium salts				CAS: 68891-38-3
The substance is not classified as hazardous for the aquatic environment.				
Fish				
LC ₅₀ , 96 hrs., Danio rerio: 7.1 mg/l (mortality, OECD 203). EC ₁₀ , 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).				
Crustaceans				
EC ₅₀ , 48 hrs., Daphnia Magna: 7.4 mg/l (mobility, OECD 202). NOEC, 21 d., Daphnia Magna: ≥ 1.19 mg/l (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).				
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 acyl derivs., inner salts				CAS: 97862-59-4
The substance is classified as Aquatic Chronic 3; H412.				
Fish				
LC ₅₀ , 96 hrs., Pimephales promelas: 1.1 mg/l (mortality, OECD 203). NOEC, 37 d., Oncorhynchus mykiss: 0.135 mg/l (egg hatch, OECD 210).				
Crustaceans				
EC ₅₀ , 48 hrs., Daphnia Magna: 6.5 mg/l (mobility, OECD 202). NOEC, 21 d., Daphnia Magna: 0.32 mg/l (reproduction, OECD 211). NOEC, 21 d., Daphnia Magna: 0.56 mg/l (mortality, OECD 211).				
Algae				
EC ₅₀ , 72 hrs., Pseudokirchneriella subcapitata: ca. 8 mg/l (growth rate, OECD 201). EC ₅₀ , 72 hrs., Pseudokirchneriella subcapitata: > 10 mg/l (biomass, OECD 201). NOEC, 72 hrs., Pseudokirchneriella subcapitata: 3.2 mg/l (growth rate and biomass, OECD 201).				
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)				CAS: 68155-07-7
The substance is classified as Aquatic Chronic 2; H411.				
Fish				
LC ₅₀ , 96 hrs., Oncorhynchus mykiss: 2.4 mg/l (mortality, OECD 203). NOEC, 28 d., Oncorhynchus mykiss: 0.35 mg/l (mortality, OECD 215).				
Crustaceans				
EC ₅₀ , 48 hrs., Daphnia Magna: ca. 3.2 mg/l (mobility, OECD 202). NOEC, 21 d., Daphnia Magna: 0.07 mg/l (reproduction, OECD 211).				
Algae				
EC ₅₀ , 72 hrs., Desmodesmus subspicatus: ca. 3.9 mg/l (growth rate, OECD 201).				

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

EC₅₀, 72 hrs., *Desmodesmus subspicatus*: ca. 2.1 mg/l (biomass, OECD 201).

NOEC, 72 hrs., *Desmodesmus subspicatus*: ca. 0.3 mg/l (biomass, OECD 201).

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) a Aquatic Chronic 1; H410 (M=100).

Fish

LC₅₀, 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

EC₅₀, 48 hrs., *Daphnia Magna*: 0.099 mg/l (mobility, OECD 202).

NOEC, 21 d., *Daphnia Magna*: 11.1 µg/l (reproduction, OECD 211).

Algae

EC₅₀, 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

LC₅₀, 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

EC₅₀, 48 hrs., *Daphnia Magna*: > 100 mg/l (mobility, OECD 202).

NOEC, 21 d., *Daphnia Magna*: 2 mg/l (reproduction, literature).

Algae

IC₅₀, 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.

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

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).

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 acyl derivs., inner salts

CAS: 97862-59-4

Readily biodegradable: 91.6 % after 28 days (CO₂ evolution, OECD 301 B).

Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)

CAS: 68155-07-7

Readily biodegradable: ca. 92.5 % after 28 days (OECD 301 B).

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

CAS: 55965-84-9

Readily biodegradable: 62 % after 29 days (CO₂ evolution, OECD 301 B).

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Ethanediol	CAS: 107-21-1
Readily biodegradable: 90 - 100 % after 10 days (removal of dissolved organic carbon, OECD 301 A).	
12.3. Bioaccumulative potential	
Mixture	
Data for the mixture are not available.	
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	CAS: 68891-38-3
log Pow = 0.3 (23 °C, pH = 6.1, OECD 123).	
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 acyl derivs., inner salts	CAS: 97862-59-4
BCF = 3 (C8 derivates, (Q)SAR method). BCF = 71 (C10-18 a C18 unsaturated derivates, (Q)SAR method). log Pow = 1.79 (pH = 3 - 8, 20 °C, C8 derivates, (Q)SAR method). log Pow = 2.81 (pH = 3 - 8, 20 °C, C10 derivates, (Q)SAR method). log Pow = 3.54 (pH = 3 - 8, 20 °C, C12 derivates, (Q)SAR method). log Pow = 5.13 (pH = 3 - 8, 20 °C, C14 derivates, (Q)SAR method). log Pow = 6.15 (pH = 3 - 8, 20 °C, C16 derivates, (Q)SAR method). log Pow = 7.17 (pH = 3 - 8, 20 °C, C18 derivates, (Q)SAR method).	
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	CAS: 68155-07-7
BCF = ca. 65.36 l/kg (calculation). log Pow = ca. 1.35 - ≤ 4.84 (20 °C, pH = ca. 5.5, OECD 117).	
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	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).	
Ethanediol	CAS: 107-21-1
log Pow = -1.36 (literature).	
12.4. Mobility in soil	
Mixture	
Data for the mixture are not available.	
Alcohols, C12-14, ethoxylated, sulfates, sodium salts	CAS: 68891-38-3
Koc = 2.2 (Q)SAR method.	
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 acyl derivs., inner salts	CAS: 97862-59-4
log Koc = 2.423 - 5.081 ((Q)SAR method).	
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	CAS: 68155-07-7
Koc = 243 l/kg (calculation).	
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS: 55965-84-9

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

Koc = 6.4 - 10 (pH = 4.7 - 7.4, OECD 106).

Ethanediol

CAS: 107-21-1

log Koc = 0 l/kg ((Q)SAR method).

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

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

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.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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

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

Change of the 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

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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
ATE	Acute Toxicity Estimate
bw	body weight
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.
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.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

SAFETY DATA SHEET

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

KRYSTAL Soap detergent

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.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container by handing it over to a collection yard or sorted waste.

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.