

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

Date of revision: 02. 11. 2022

Version: 5.0

Replaced version from: 17. 12. 2021

Date of issue: 26. 06. 2014

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

#### 1.1. Product identifier

**Product Name**

KRYSTAL Abrasive detergent

**UFI code**

UFI: X0F0-A013-600U-NP50

**Product code**

Not given.

**Mixture description**

Water solution.

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

**Identified uses**

Abrasive detergent.

Consumer use.

**Uses advised against**

Unsuitable for long-term use on polished surfaces and plastics.

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](mailto:info@cormen.cz)

#### 1.4. Emergency telephone number

112 (General emergency phone).

### SECTION 2: Hazards identification

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

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

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

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive 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 Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., Amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl), 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 Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Composition according to regulation 648/2004/EC on detergents:  $\geq 5$  -  $< 15$  % phosphates,  $< 5$  % non-ionic surfactants, anionic surfactants, perfumes, LIMONENE and preservation agents (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 Abrasive 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
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.			
CAS Number	85536-14-7	< 5.0	Acute Tox. 4; H302
EC Number	287-494-3		Skin Corr. 1C; H314
Index Number	not given		Eye Dam. 1; H318
Registration Number	01-2119490234-40-XXXX		Aquatic Chronic 3; H412
Amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl)			
CAS Number	69227-24-3	< 4.0	Skin Irrit. 2; H315
EC Number	931-330-1		Eye Dam. 1; H318
Index Number	not given		Aquatic Chronic 2; H411
Registration Number	01-2119490101-51-XXXX		
Sodium hydroxide; Caustic soda			
CAS Number	1310-73-2	< 0.7	Met. Corr. 1; H290
EC Number	215-185-5		Skin Corr. 1A; H314
Index Number	011-002-00-6		Eye Dam. 1; H318
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 %	
Skin Irrit. 2; H315		0.5 % ≤ C < 2 %	
Eye Irrit. 2; H319		0.5 % ≤ C < 2 %	
2-Aminoethanol; Ethanolamine			
CAS Number	141-43-5	< 0.2	Acute Tox. 4; H302
EC Number	205-483-3		Acute Tox. 4; H312
Index Number	603-030-00-8		Skin Corr. 1B; H314
Registration Number	01-2119486455-28-XXXX		Eye Dam. 1; H318
			Acute Tox. 4; H332
			STOT SE 3; H335
			Aquatic Chronic 3; H412
The substance has specific concentration limits:			
STOT SE 3; H335		C ≥ 5 %	
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 Abrasive detergent

CAS Number	55965-84-9		Acute Tox. 3; H301
EC Number	not given		Acute Tox. 2; H310
Index Number	613-167-00-5	< 0.0015	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		$C \geq 0.6 \%$	
Eye Dam. 1; H318		$C \geq 0.6 \%$	
Skin Irrit. 2; H315		$0.06 \% \leq C < 0.6 \%$	
Eye Irrit. 2; H319		$0.06 \% \leq C < 0.6 \%$	
Skin Sens. 1A; H317		$C \geq 0.0015 \%$	

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

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### 5.1. Extinguishing media

#### ***Suitable extinguishing media***

##### Small fire:

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

##### Extensive fire:

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

#### ***Unsuitable extinguishing media***

Solid streams of water may be ineffective.

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

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

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

### 5.3. Advice for firefighters

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

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

## SECTION 6: Accidental release measures

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

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

### 6.2. Environmental precautions

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

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

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

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

### 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

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

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. 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

**2-Aminoethanol** CAS: 141-43-5

Limit values - Eight hours		Limit values - Short-term		Note
2.5 mg/m <sup>3</sup>	1 ppm	7.6 mg/m <sup>3</sup>	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 <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	119 mg/kg/day
General population	Inhalation	Systemic effect	Long term	1.3 mg/m <sup>3</sup>
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

**Amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl)** CAS: 69227-24-3

#### DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
-------------	-------------------	--------	---------------	-------

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

Workers	Inhalation	Systemic effect	Long term	73.4 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	4.16 mg/kg/day
General population	Inhalation	Systemic effect	Long term	21.7 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	2.5 mg/kg/day
General population	Oral	Systemic effect	Long term	6.25 mg/kg/day
<b>PNEC</b>				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
0.007 mg/l	0.001 mg/l	Fresh water	Marine water	830 mg/l
		0.03 mg/l	not given	
<b>PNEC</b>				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
1.012 mg/kg	0.101 mg/kg	no effect	0.198 mg/kg	no effect
<b>Sodium hydroxide</b>				CAS: 1310-73-2
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Local effect	Long term	1 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Long term	1 mg/m <sup>3</sup>
<b>PNEC - not yet available</b>				
<b>2-Aminoethanol</b>				CAS: 141-43-5
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	1 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Long term	0.51 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	3 mg/kg/day
General population	Inhalation	Systemic effect	Long term	0.18 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Long term	0.28 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	1.5 mg/kg/day
General population	Oral	Systemic effect	Long term	1.5 mg/kg/day
<b>PNEC</b>				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
0.07mg/l	0.007 mg/l	Fresh water	Marine water	100 mg/l
		0.028 mg/l	not given	
<b>PNEC</b>				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.357 mg/kg	0.036 mg/kg	no effect	1.29 mg/kg	no effect
<b>8.2. Exposure controls</b>				



# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### 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

In normal use is not necessary, in case of prolonged contact with the product, wear protective work clothes and shoes.

#### 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

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

<b>Physical state</b>	Liquid (suspension).
<b>Colour</b>	Light blue.
<b>Odour</b>	Characteristic.
<b>Melting point/freezing point</b>	Not determined.
<b>Boiling point or initial boiling point and boiling range</b>	100 °C
<b>Flammability</b>	Not determined.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.



# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

<b>Flash point</b>	>100 °C.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition temperature</b>	Not determined, the mixture does not contain self-reactive substances or organic peroxides or other substances which may decompose.
<b>pH</b>	9.5
<b>Kinematic viscosity</b>	Not determined, the mixture does not contain a substance classified as aspiration toxic, or the sum of the concentrations of substances classified as aspiration toxic is less than 10 wt. %.
<b>Solubility</b>	Fully miscible.
<b>Partition coefficient n-octanol/water (log value)</b>	Does not apply to mixture.
<b>Vapour pressure</b>	23 hPa
<b>Density and/or relative density</b>	1.3053 g/cm <sup>3</sup> (20 °C).
<b>Relative vapour density</b>	Not determined.
<b>Particle characteristics</b>	Does not apply to liquid.
<b>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.</b> CAS: 85536-14-7	
<b>Physical state</b>	Liquid.
<b>Colour</b>	Brown.
<b>Odour</b>	Characteristic.
<b>Melting point/freezing point</b>	279.5 K (EU method A.1).
<b>Boiling point or initial boiling point and boiling range</b>	462.2 K (EU method A.2).
<b>Flammability</b>	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.
<b>Flash point</b>	196.9 °C (ASTM D93/07).
<b>Auto-ignition temperature</b>	380 °C (ASTM E 659-78).
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
<b>pH</b>	Not determined.
<b>Kinematic viscosity</b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
<b>Solubility</b>	> 16 g/ 100 g H <sub>2</sub> O (20 °C, OECD 105).
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = 2.2 (23 °C, pH = 3.7, OECD 123).
<b>Vapour pressure</b>	1.06 * 10 <sup>-8</sup> Pa (25 °C, (Q)SAR method).
<b>Density and/or relative density</b>	D <sub>4</sub> <sup>20</sup> = 1.05 (OECD 109).
<b>Relative vapour density</b>	Not determined.

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

<b>Particle characteristics</b>	Does not apply to liquid.
<b>Amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl)</b>	CAS: 69227-24-3
<b>Physical state</b>	Solid.
<b>Colour</b>	Yellow.
<b>Odour</b>	Odourless.
<b>Melting point/freezing point</b>	> 57.3 - < 60.5 °C (ASTM D87-87).
<b>Boiling point or initial boiling point and boiling range</b>	Not determined, substance decomposes.
<b>Flammability</b>	The substance is not classified as flammable (EU method A.10).
<b>Lower explosion limit</b>	Does not apply to solid.
<b>Upper explosion limit</b>	Does not apply to solid.
<b>Flash point</b>	Does not apply to solid.
<b>Auto-ignition temperature</b>	Does not apply to solid.
<b>Decomposition temperature</b>	Not determined.
<b>pH</b>	Not determined.
<b>Kinematic viscosity</b>	Does not apply to solid.
<b>Solubility</b>	Not determined.
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = ca. 4.27 (calculation).
<b>Vapour pressure</b>	0 Pa (25 °C, OECD 104).
<b>Density and/or relative density</b>	$D_4^{20} = 1.0$ (ISO 758).
<b>Relative vapour density</b>	Does not apply to solid.
<b>Particle characteristics</b>	Not determined.
<b>Sodium hydroxide</b>	CAS: 1310-73-2
<b>Physical state</b>	Solid.
<b>Colour</b>	White.
<b>Odour</b>	Odourless.
<b>Melting point/freezing point</b>	323 °C (literature).
<b>Boiling point or initial boiling point and boiling range</b>	1 388 °C (literature).
<b>Flammability</b>	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
<b>Lower explosion limit</b>	Does not apply to solid.
<b>Upper explosion limit</b>	Does not apply to solid.
<b>Flash point</b>	Does not apply to solid.
<b>Auto-ignition temperature</b>	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 Abrasive detergent

<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
<b>pH</b>	Not determined, strong alkaline substance.
<b>Kinematic viscosity</b>	Does not apply to solid.
<b>Solubility</b>	100 g/100 g H <sub>2</sub> O (25 °C, literature).
<b>Partition coefficient n-octanol/water (log value)</b>	Not determined, it is an inorganic substance.
<b>Vapour pressure</b>	Not determined, the substance has melting point higher than 300 °C.
<b>Density and/or relative density</b>	2.13 g/cm <sup>3</sup> (20 °C, literature).
<b>Relative vapour density</b>	Does not apply to solid.
<b>Particle characteristics</b>	Not determined, solid NaOH is in the form of large particles (flakes).
<b>2-Aminoethanol</b> CAS: 141-43-5	
<b>Physical state</b>	Liquid.
<b>Colour</b>	Clear.
<b>Odour</b>	Aminic.
<b>Melting point/freezing point</b>	4 °C (ASTM E 737-76).
<b>Boiling point or initial boiling point and boiling range</b>	167 °C (ASTM-E 737-76).
<b>Flammability</b>	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.
<b>Flash point</b>	91 °C (ISO 2719).
<b>Auto-ignition temperature</b>	424 °C (ASTM E 659).
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
<b>pH</b>	12.1 (concentration 100 g/l, 20 °C).
<b>Kinematic viscosity</b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
<b>Solubility</b>	> 1 000 g/l (20 °C, pH = 12.1).
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = -2.3 (25 °C, pH = 6.8 - 7.3, OECD 107).
<b>Vapour pressure</b>	0.5 hPa (20 °C, literature). 4.1 hPa (50 °C, literature).
<b>Density and/or relative density</b>	1.02 g/cm <sup>3</sup> (20 °C, DIN 51757).
<b>Relative vapour density</b>	Not determined.
<b>Particle characteristics</b>	Does not apply to liquid.

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### 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.

##### **Pyrophoric solids**

It is not solid.

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

Data for the mixture are not available.

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

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

Data for the mixture are not available.

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

##### **Oxidising liquids**

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

Data for the mixture are not available.

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

### ***Oxidizing solids***

It is not solid.

### ***Organic peroxides***

Data for the mixture are not available.

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

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

Data for the mixture are not available.

The mixture is not classified as corrosive to metals according to its low sodium hydroxide content.

### ***Desensitised explosives***

Data for the mixture are not available.

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

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

CAS: 85536-14-7

### ***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 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***

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

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.

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

CAS: 69227-24-3

### **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.

### **Flammable liquids**

It is not liquid.

### **Flammable solids**

The substance is not classified as flammable solid (EU method A.10).



# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### ***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.

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***

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.

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### ***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.

### ***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.

**2-Aminoethanol**

CAS: 141-43-5

### ***Explosives***

Data for the substance are not available.

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

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### **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 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.

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### **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**

<b>Mechanical sensitivity</b>	Not determined, it is not an explosive substance.
<b>Self-accelerating polymerisation temperature</b>	Not determined, it is not a polymerising substance.
<b>Formation of explosible dust/air mixtures</b>	Not determined, it is not a dust.
<b>Acid/alkaline reserve</b>	Not determined, pH is in the range 4 - 10.
<b>Evaporation rate</b>	Not determined.
<b>Miscibility</b>	Not determined.
<b>Conductivity</b>	Not determined.
<b>Corrosiveness</b>	Not determined.
<b>Gas group</b>	Not determined, it is not gas.
<b>Redox potential</b>	Not determined.
<b>Radical formation potential</b>	Not determined.
<b>Photocatalytic properties</b>	Not determined.

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

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

### **10.2. Chemical stability**

Stable under recommended storage conditions.

### **10.3. Possibility of hazardous reactions**

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

### **10.4. Conditions to avoid**

Protect from temperatures below 0 °C.

### **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.

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

<b>Oral</b>	Data for the mixture are not available. ATE <sub>mixture</sub> > 2 000 mg/kg (estimate, low concentration of substances classified as toxic oral route of exposure).
<b>Dermal</b>	Data for the mixture are not available. ATE <sub>mixture</sub> > 2 000 mg/kg (estimate, low concentration of substances classified as toxic dermal route of exposure).
<b>Inhalation</b>	Data for the mixture are not available. ATE <sub>mixture</sub> > 20 mg/kg (estimate, low concentration of substances classified as toxic inhalation route of exposure).

### **Skin corrosion/irritation**

Data for the mixture are not available.  
The mixture is not classified as corrosive/irritant to the skin according to the test.  
Primary skin irritation index I<sub>KI</sub> = 0 (simple application 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**

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

### **STOT – repeated exposure**

Data for the mixture are not available.  
The mixture does not contain 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.

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### **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.  
LD<sub>50</sub> = ca. 1 470 mg/kg (rat, OECD 401).

**Dermal** Based on available data, the classification criteria are not met.  
LD<sub>50</sub> > 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).

### **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**



# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

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 mm<sup>2</sup>/s or less at 40 °C.

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

CAS: 69227-24-3

### **Acute toxicity**

**Oral** Based on available data, the classification criteria are not met.  
LD<sub>50</sub> > 2 000 mg/kg (rat, OECD 401).

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

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

### **Skin corrosion/irritation**

The substance is classified as skin irritant.

Mean erythema score = 2; 2.33; 3 (fully reversible after 14 days) and oedema = 0.33; 0.33; 1.33 (fully reversible after 14 days) (rabbit, 72 hrs., OECD 404).

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

The substance is classified as seriously damaging to the eyes.

Overall irritation score = 26.8 (max. 110, not fully reversible after 21 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 471, OECD 473, OECD 476).

### **Carcinogenicity**

Data for the substance are not available.

### **Reproductive toxicity**

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

NOAEL = ca. 1 000 mg/kg/day (reproduction, rat, oral, generation P0, OECD 422).

NOAEL = 1 000 mg/kg/day (toxic effect, rat, oral, generation F1, OECD 422).

### **STOT – single exposure**

Data for the substance are not available.

### **STOT – repeated exposure**

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

NOAEL > 750 mg/kg/day (rat, oral, 28 days, OECD 407).

### **Aspiration hazard**

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

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

### 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

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 mm<sup>2</sup>/s or less at 40 °C.

### 2-Aminoethanol

CAS: 141-43-5

#### Acute toxicity

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

<b>Oral</b>	The substance is classified in category 4. LD <sub>50</sub> = 1 089 mg/kg (rat, OECD 401).
<b>Dermal</b>	The substance is classified in category 4 according to harmonized classification. LD <sub>50</sub> = 2 504 mg/kg (rabbit, male, OECD 402). LD <sub>50</sub> = 2 881 mg/kg (rabbit, female, OECD 402). ATE = 1 100 mg/kg (for calculation by additive formula).
<b>Inhalation</b>	The substance is classified in category 4 according to harmonized classification. LC <sub>50</sub> > 1.3 mg/l (vapour, rat, 6 hrs., no death is observed, OECD 403). ATE = 11 mg/l (for calculation by additive formula, vapour).

### **Skin corrosion/irritation**

The substance is classified as skin corrosion in category 1B.  
Mean erythema score = 1.5; 1.5; 1.83; 3 (exposure time 1 min; 5 min; 15 min; 20 h; not fully reversible) and edema = 0; 0.16; 0.66; 1.33 (exposure time 1 min; 5 min; 15 min; 20 h; not fully reversible after 8 days) (rabbit, 72 h, OECD 404).

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

The substance is classified as seriously damaging to the eyes.  
Mean score of corneal opacity = 3 (not fully reversible), iritis = 0.88, conjunctival erythema = 0.89 (not fully reversible), conjunctival edema = 1.33 (fully reversible) (rabbit, 72 hours, OECD 405).

### **Respiratory or skin sensitisation**

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

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.  
Negative (OECD 471, OECD 473, OECD 476).

### **Carcinogenicity**

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

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.  
NOAEL = 1 000 mg/kg/day (reproduction, rat, male, oral, generation P0, OECD 416).  
NOAEL = 300 mg/kg/day (reproduction, rat, female, oral, generation P0, OECD 416).  
NOAEL = 1 000 mg/kg/day (reproduction, rat, male, oral, generation F1, OECD 416).  
NOAEL = 300 mg/kg/day (reproduction, rat, female, oral, generation F1, OECD 416).

### **STOT – single exposure**

Data for the substance are not available.  
The substance may cause respiratory irritation.

### **STOT – repeated exposure**

Based on available data, the classification criteria are not met.  
NOAEL = 300 mg/kg/day (body weight and weight gain, food consumption and compound intake, organ weights and organ/body weight ratios, rat, oral, OECD 416).  
NOEC = 150 mg/m<sup>3</sup> (systemic effect, rat, vapor/aerosol, 28 d., OECD 412).  
NOEC = 10 mg/m<sup>3</sup> (local effect, rat, steam/aerosol, 28 d., OECD 412).

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

### Aspiration hazard

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

### 11.2. Information on other hazards

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

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

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Mixture

Data for the mixture are not available.

#### Acute aquatic toxicity

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

category 1

$\Sigma < 0.15$

#### Chronic aquatic toxicity

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

Sum of concentration	EqNOEC <sub>m</sub>	Classification	M-factor	
< 9 wt. %	0.114091 mg/l	Aquatic Chronic 3; H412	not relevant	
category	1	2	3	4
Σ	< 0.15	< 1.5	< 24.2	< 9.2015

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

CAS: 85536-14-7

The substance is classified as Aquatic Chronic 3; H412.

#### Fish

LC<sub>50</sub>, 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

EC<sub>50</sub>, 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

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

EC<sub>50</sub>, 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).

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

CAS: 69227-24-3

The substance is classified as Aquatic Chronic 2; H411.

#### **Fish**

LC<sub>50</sub>, 96 hrs., Oncorhynchus mykiss: > 3 mg/l (mortality, OECD 203).

NOEC, 28 d., Oncorhynchus mykiss: ca. 0.32 mg/l (mortality, OECD 210).

#### **Crustaceans**

EC<sub>50</sub>, 48 hrs., Daphnia Magna: ca. 3 mg/l (mobility, OECD 202).

NOEC, 21 d., Daphnia Magna: 0.07 mg/l (survival, reproduction rate, OECD 211).

#### **Algae**

EC<sub>50</sub>, 72 hrs., Desmodesmus subspicatus: ca. 8.7 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<sub>50</sub>, 48 hrs, Leuciscus idus: 189 mg/l (mortality).

#### **Crustaceans**

EC<sub>50</sub>, 48 hrs, Ceriodaphnia sp.: 40.4 mg/l (immobility).

#### **Algae**

Data for the substance are not available.

### 2-Aminoethanol

CAS: 141-43-5

The substance is classified as Aquatic Chronic 3; H412.

#### **Fish**

LC<sub>50</sub>, 96 hrs., Cyprinus carpio: 349 mg/l (mortality).

NOEC, 41 d., Oryzias latipes: 1.24 mg/l (mortality, OECD 210).

#### **Crustaceans**

EC<sub>50</sub>, 48 hrs., Daphnia Magna: 27.04 mg/l (mobility, OECD 202).

NOEC, 21 d., Daphnia Magna: 0.85 mg/l (reproduction, OECD 202).

#### **Algae**

EC<sub>50</sub>, 72 hrs., Pseudokirchneriella subcapitata: 2.8 mg/l (growth rate, OECD 201).

EC<sub>50</sub>, 72 hrs., Pseudokirchneriella subcapitata: 2.1 mg/l (biomass, OECD 201).

NOEC, 72 hrs., Pseudokirchneriella subcapitata: 1 mg/l (growth rate, OECD 201).

NOEC, 72 hrs., Pseudokirchneriella subcapitata: 1 mg/l (biomass, OECD 201).

## 12.2. Persistence and degradability

### Mixture

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

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.

<b>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.</b>	CAS: 85536-14-7
---	-----------------

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

<b>Amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl)</b>	CAS: 69227-24-3
--	-----------------

Readily biodegradable: ca. 99 % after 28 days (CO<sub>2</sub> evolution, OECD 301 B).

<b>Sodium hydroxide</b>	CAS: 1310-73-2
-------------------------	----------------

Not determined, it is an inorganic substance.

<b>2-Aminoethanol</b>	CAS: 141-43-5
-----------------------	---------------

Readily biodegradable: > 90 % after 28 days (removal of dissolved organic carbon, OECD 301 A).

### 12.3. Bioaccumulative potential

#### Mixture

Data for the mixture are not available.

<b>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.</b>	CAS: 85536-14-7
---	-----------------

log Pow = 2.2 (23 °C, pH = 3.7, OECD 123).

<b>Amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl)</b>	CAS: 69227-24-3
--	-----------------

BCF = 45.27 - 65.321 ((Q)SAR method).

log Pow = ca. 4.27 (calculation).

<b>Sodium hydroxide</b>	CAS: 1310-73-2
-------------------------	----------------

Not determined, it is an inorganic substance.

<b>2-Aminoethanol</b>	CAS: 141-43-5
-----------------------	---------------

log Pow = -2.3 (25 °C, pH = 6.8 - 7.3, OECD 107).

### 12.4. Mobility in soil

#### Mixture

Data for the mixture are not available.

<b>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.</b>	CAS: 85536-14-7
---	-----------------

Not determined.

<b>Amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl)</b>	CAS: 69227-24-3
--	-----------------

1 312.66 - 1 625.52 ((Q)SAR method).

<b>Sodium hydroxide</b>	CAS: 1310-73-2
-------------------------	----------------

Not determined, it is an inorganic substance.

<b>2-Aminoethanol</b>	CAS: 141-43-5
-----------------------	---------------

Log Koc = 2.3 - 2.7 (literature).

### 12.5. Results of PBT and vPvB assessment



# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

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 (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 dangerous 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

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

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.

### 14.8. Other information

#### Labeling according to ADR



#### Additional data for ADR/RID

Classification code	C9
Labels	8
Hazard identification code	80
Tunnel restriction code	E (ADR), - (RID)
Limited quantities	5 l
Excepted quantities	Maximum net quantity per inner packaging: 30 ml. Maximum net quantity per outer packaging: 1 000 ml.
Transport category	3

#### Additional data for IMDG

Emergency Schedules (EmS)	F-A, S-B
---------------------------	----------

## 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

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

Change of the classification and labeling of the mixture and related changes in the other sections. Change in Section 14.

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

Acute Tox. 2	Acute toxicity, cat. 2
Acute Tox. 3	Acute toxicity, cat. 3
Acute Tox. 4	Acute toxicity, cat. 4
Aquatic Acute 1	Acute aquatic hazard, cat. 1
Aquatic Chronic 1	Chronic aquatic hazard, cat. 1
Aquatic Chronic 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
STOT SE 3	Specific target organ toxicity - single exposure, cat. 3
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.
H290	May be corrosive to metals.

# SAFETY DATA SHEET

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

## KRYSTAL Abrasive detergent

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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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**

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.