

# SAFETY DATA SHEET

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

Date of issue: 26. 11. 2012

Product code: VBSDOXXX98-CLP

Version: 5.0

Date of revision: 20. 12. 2018

Replaced version from: 05. 12. 2018

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Trade Name: **KRYSTAL Sanan**

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

### 1.1 Product identifier

Trade Name

**KRYSTAL Sanan**

Mixture description

An aqueous solution of surfactant, sodium hypochlorite and sodium hydroxide.

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

Identified uses

The disinfectant and cleaning agent for surfaces and objects, removing odors, discolouration and bleaching textiles.

Uses advised against

Only for identified uses.

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

**CORMEN s.r.o.**

Průmyslová 1420

593 01 Bystřice nad Pernštejnem

Czech Republic

telephone: +420 566 550 961

fax: +420 566 551 822

e-mail address for a competent person responsible for the SDS: info@cormen.cz

### 1.4 Emergency telephone number

112 (General emergency phone), 998 (fire brigade), 999 (ambulance service).

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

Classification according to 1272/2008/EC

**Met. Corr. 1; H290**

**Skin Corr. 1B; H314**

**Eye Dam. 1; H318**

**Aquatic Acute 1; H400**

**Aquatic Chronic 2; H411**

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

**The most important adverse physicochemical, human health and environmental effects**

May be corrosive to metals. Causes severe skin burns and eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

hazard pictograms



signal word

Danger

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*components of the mixture to be placed on the label*

Contains  
Sodium hypochlorite  
Sodium hydroxide  
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

*hazard statements*

H290 - May be corrosive to metals.  
H314 - Causes severe skin burns and eye damage.  
H400 - Very toxic to aquatic life.  
H411 - Toxic to aquatic life with long lasting effects.

*precautionary statements*

P102 - Keep out of reach of children.  
P260 - Do not breathe mist/vapours/spray.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
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.  
P390 - Absorb spillage to prevent material damage.  
P501 - Dispose of contents/container to in accordance with local regulations.

*supplemental hazard information*

EUH031 - Contact with acids liberates toxic gas.  
EUH206 - Warning! Do not use together with other products. May release dangerous gases (chlorine).  
Composition:  $\geq 30\%$  water, 5 -  $<15\%$  chlorine-based bleaching agents,  $<5\%$  nonionic surfactants, sodium hydroxide and perfumes.  
Protect from frost.

## 2.3 Other hazards

Mixture or its components are not classified as PBT or vPvB, not the date of issue of the safety data sheet kept on the candidate list for Annex XIV of the REACH Regulation.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### 3.2.1 Components of a mixture classified as hazardous

Chemical identity	CAS Number EC Number Index Number	Registration Number	Content (wt. %)	Classification 1272/2008/EC
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Sodium hypochlorite*	7681-52-9 231-668-3 017-011-00-1	01-2119488154-34-XXXX	4.0 - 6.5	Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M=10 M(Chronic)=1 EUH031
Sodium hydroxide**	1310-73-2 215-185-5 011-002-00-6	01-2119457892-27-XXXX	0.65 - 0.80	Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	308062-28-4 931-292-6 not given	01-2119490061-47-XXXX	< 0.5	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M=1

\*) The substance has specific concentration limits: C  $\geq$  5 %: EUH031.

\*\*) The substance has specific concentration limits: C  $\geq$  5 %: Skin Corr. 1A; H314, 2 %  $\leq$  C < 5 %: Skin Corr. 1B; H314, 0.5 %  $\leq$  C < 2 %: Skin Irrit. 2; H315, 0.5 %  $\leq$  C < 2 %: Eye Irrit. 2; H319.

## 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. An unconscious person never give anything.

### 4.1 Description of first aid measures

#### Inhalation

Break the exposure, transfer the person to the fresh air. If symptoms persist, seek medical attention.

#### Skin contact

Remove contaminated clothing, shoes, and wash thoroughly with water (preferably lukewarm) and soap. Do not use solvents or thinners. 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. Immediately call in physician.

#### Ingestion

Rinse your mouth and drink afterwards plenty of water. Do not induce vomiting. Do not give milk or alcoholic beverages. Unconscious person never give anything by mouth. Seek medical help.

### 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.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### **Suitable extinguishing media**

##### Small fire:

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

##### Extensive fire:

Fragmented water streams (water mist), foam.

#### **Extinguishing media which shall not be used for safety reasons**

Solid streams of water may be ineffective.

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

Wear protective clothing covering the entire body, suitable gloves and goggles or face shield. In the event of a large fire, wear self-contained breathing apparatus.

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

### 5.3 Advice for firefighters

Stop further product leak 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 with flooding quantities of water.

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.

### 6.2 Environmental precautions

Do not allow to enter waters or soil. If this cannot be avoided, immediately inform the competent authorities (police and firefighters).

### 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.

If the packaging is damaged, move the contents to the new, undamaged packaging and label them again.

### 6.4 Reference to other sections

Protective equipment: see section 8. Dispose according to the section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Provide good ventilation to prevent the formation of vapor and aerosol. Avoid contact with skin and eyes. Do not use dirty clothes. After work, rinse thoroughly with warm water and soap. Use a protective cream.

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

Store only in the original container at 15 - 30 ° C. Replace the damaged packaging with a new one. Do not store together with acids. Protect from frost. Do not expose to heat and direct sunlight.

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## 7.3 Specific end use(s)

Krystal Sanan is a cleaning and disinfecting preparation containing chlorine, which reliably destroys bacteria, algae, lower fungi and viruses. Removes odors, discolours and bleaches fabrics. To clean and disinfect floors, furniture, kitchen utensils and hygiene, for bleaching, for surface disinfection in the food and agricultural industries. To increase the disinfecting effect, it is recommended to remove organic impurities from surfaces and objects.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 8.1.1 Exposure limit value

##### **EU**

##### Chlorine:

Limit values: Eight hours: - mg/m<sup>3</sup>, - ppm; Short-term: 1.5 mg/m<sup>3</sup>, 0.5 ppm.

##### **Czech republic**

##### Chlorine:

PEL – 1 mg/m<sup>3</sup>, NPK-P - 2 mg/m<sup>3</sup>.

Note I - irritates mucous membranes (eyes, respiratory tract), resp. skin

##### Sodium hydroxide:

PEL – 1 mg/m<sup>3</sup>, NPK-P - 2 mg/m<sup>3</sup>.

Note I - irritates mucous membranes (eyes, respiratory tract), resp. skin

PEL - Permissible Exposure Limit, long term (8 hours)

NPK-P - Highest permissible concentration, short-term limit

#### 8.1.2 Biological limit values

Not are determined in EU

#### 8.1.3 DNEL and PNEC values

<b>Sodium hypochlorite</b>	CAS: 7681-52-9
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#### DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	1.55 mg/m <sup>3</sup>
Workers	Inhalation	Systemic effect	Acute/short term	3.1 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Long term	1.55 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Acute/short term	3.1 mg/m <sup>3</sup>
General population	Inhalation	Systemic effect	Long term	1.55 mg/m <sup>3</sup>
General population	Inhalation	Systemic effect	Acute/short term	3.1 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Long term	1.55 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Acute/short term	3.1 mg/m <sup>3</sup>
General population	Oral	Systemic effect	Long term	0.26 mg/kg/day

#### PNEC

Fresh water	Marine water	Intermittent releases	STP	Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
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0.21 µg/l	0.042 µg/l	0.26 µg/ l	4.69 mg/l	not given	not given	no effect	not given	11.1 mg/kg food
Sodium hydroxide							CAS: 1310-73-2	
DNEL								
Area of use		Route of exposure		Effect		Exposure time		Value
Workers		Inhalation		Local effect		Long term		1 mg/m³
General population		Inhalation		Local effect		Long term		1 mg/m³
PNEC - not given								
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides							CAS: 308062-28-4	
DNEL								
Area of use		Route of exposure		Effect		Exposure time		Value
Workers		Inhalation		Systemic effect		Long term		6.2 mg/m³
Workers		Dermal		Systemic effect		Long term		11 mg/kg/day
General population		Inhalation		Systemic effect		Long term		1.53 mg/m³
General population		Dermal		Systemic effect		Long term		5.5 mg/kg/day
General population		Oral		Systemic effect		Long term		0.44 mg/kg/day
PNEC								
Fresh water	Marine water	Intermittent releases	STP	Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.034 mg/l	0.003 mg/l	0.034 mg/l	24 mg/l	5.24 mg/kg	0.524 mg/kg	no effect	1.02 mg/kg	11.1 mg/kg food

## 8.2 Exposure controls

### 8.2.1 Exposure reduction (technical measures)

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

#### Respiratory protection

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

#### Hand protection

Chemically resistant protective gloves. As there are no tests, it is not possible to recommend the glove material for this mixture. The selection of the glove material on consideration of the penetration time, permeability and degradation.

#### Eye/face protection

Protective glasses or face shield.

#### Skin protection

Wear suitable protective clothing and footwear.

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.

### 8.2.3 Environmental exposure reduction

Uncontrolled escape of substance/formulation into environment is to be avoided.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b> (at 20 C)	liquid, light yellow - light green
<b>Odour</b>	characteristic, fresh odour of camphor, mint, fruit
<b>Odour threshold</b>	not determined
<b>pH</b> (at 20 C)	12.979 (concentrated)
<b>pH</b> (at 20 C)	11.528 (1% solution)
<b>Melting point/freezing point</b>	not determined
<b>Boiling point</b> (range)	100 C
<b>Flash point</b>	> 100 C
<b>Evaporation rate</b>	not determined
<b>Flammability</b>	not determined
<b>Explosive limits</b> <b>lower</b> (% vol.)	not determined
<b>upper</b> (% vol.)	not determined
<b>Vapour pressure</b> (at 20 C)	23 hPa
<b>Vapour density</b>	not determined
<b>Relative density</b>	1.0846 (water = 1)
<b>Solubility in water</b> (at 20 C)	soluble
<b>Solubility in organic solvents:</b>	not determined
<b>Partition coefficient: n-octanol/water</b>	not determined
<b>Auto-ignition temperature</b>	not determined
<b>Decomposition temperature</b>	not determined
<b>Viscosity</b>	not determined
<b>Explosive properties</b>	is not classified as explosive
<b>Oxidising properties</b>	is not classified as an oxidant

### 9.2 Other information

<b>Organic solvents</b>	0.0 %
<b>Water</b>	93.5 %
<b>VOC</b>	0.0 %
<b>Alkalinity</b>	1.1465 %
<b>Surface tension</b>	28.3 nM/m

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The mixture is stable under normal conditions of use.

### 10.2 Chemical stability

Stable under recommended storage conditions.



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## 10.3 Possibility of hazardous reactions

Not known.

## 10.4 Conditions to avoid

Extremely high and low temperatures. Do not expose to direct sunlight.

## 10.5 Incompatible materials

Acid, production of chlorine under the action of acids. Reducing agents, peroxides, metals and amines.

## 10.6 Hazardous decomposition products

Burning releases carbon oxides, nitrogen oxides, chlorine oxides, chlorine, hydrogen chloride, sodium oxides and products of incomplete combustion.

# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Acute toxicity

- *LD<sub>50</sub> oral, rat (mg/kg)*

Data for the mixture are not available

> 212 800 - calculation according to the additive formula

1 100 - sodium hypochlorite (as Cl<sub>2</sub>, male)

1 064 - CAS 308062-28-4

- *LD<sub>50</sub> skin, rat or rabbit (mg/kg)*

Data for the mixture are not available

> 20 000 - sodium hypochlorite (rabbit)

> 2 000 - CAS 308062-28-4 (rat)

- *LC<sub>50</sub> inhalation, rat (mg/l, 4 h)*

Data for the mixture are not available

10.5 - sodium hypochlorite (1 hrs., vapour, male)

### Skin corrosion/irritation

Causes severe skin burns and eye damage.

classified as corrosive to skin - sodium hypochlorite 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), PDII = 2.7 - sodium hydroxide, 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), PDII = 5.6 - sodium hydroxide (rabbit, Draize test)

irritating to the skin mean erythema score = 4 and edema = 0, PDII = 4 - CAS 308062-28-4 (rabbit, 72 h, OECD 404)



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

Causes severe eye damage.

severely damages eyes - sodium hypochlorite  
mean corneal opacity > 2, conjunctival redness > 2.5 -  
sodium hydroxide (2 wt.%, rabbit, 72 h, OECD 405).

irreversibly damaging the eyes - CAS 308062-28-4  
(rabbit, OECD 405)

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

Not containing these substances (or less than the  
classification limit)

not skin sensitising - sodium hypochlorite (guinea pig,  
OECD 406)

not skin sensitising - sodium hydroxide (human)

not skin sensitising - CAS 308062-28-4 (guinea pig,  
OECD 406)

## ***Carcinogenicity***

Not containing these substances (or less than the  
classification limit)

LOAEL = 100 mg/kg/day - sodium hypochlorite (toxicity,  
rat, male, oral, OECD 453)

LOAEL = 114 mg/kg/day - sodium hypochlorite (toxicity,  
rat, female, orally, OECD 453)

NOAEL = 50 mg/kg/day - sodium hypochlorite (toxicity,  
rat, male, oral, OECD 453)

NOAEL = 57.2 mg/kg/day - sodium hypochlorite (toxicity,  
rat, female, oral, OECD 453)

NOEL = 0.2% CAS 308062-28-4 in food (rat, OECD  
451)

## ***Germ cell mutagenicity***

Not containing these substances (or less than the  
classification limit)

negative - sodium hypochlorite (OECD 471)

negative - CAS 308062-28-4 (OECD 471, EU method  
B17)

## ***Reproductive toxicity***

Not containing these substances (or less than the  
classification limit)

LOAEL > 5 mg/kg/day - sodium hypochlorite (rat, oral,  
generation P0, OECD 415)

NOAEL ≥ 5 mg/kg/day - sodium hypochlorite (rat, oral,  
generation P0, OECD 415)

LOAEL > 5 mg/kg/day - sodium hypochlorite (rat, oral,  
generation F1, OECD 415)

NOAEL ≥ 5 mg/kg/day - sodium hypochlorite (rat, oral,  
generation F1, OECD 415)

NOAEL = 40 mg/kg/day - CAS 308062-28-4 (rat, oral,  
OECD 422)

## ***Specific target organ toxicity – single exposure***

Not classified

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## ***Specific target organ toxicity – repeated exposure***

Not classified

LOAEL = 100 mg/kg/day - sodium hypochlorite (rat, male, oral, OECD 453)

LOAEL = 114 mg/kg/day - sodium hypochlorite (rat, female, orally, OECD 453)

NOAEL = 50 mg/kg/day - sodium hypochlorite (rat, male, orally, OECD 453)

NOAEL = 57.2 mg/kg/day - sodium hypochlorite (rat, female, oral, OECD 453)

NOAEL = 88 mg/kg/day - CAS 308062-28-4 (rat, oral, 90 days, OECD 408)

## ***Aspiration hazard***

Not classified

## ***Other information***

See section 2 and 4.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

#### ***Fish***

Data for the mixture are not available

LC<sub>50</sub>, 96 hrs, Oncorhynchus kisutch: 0.032 mg/l - sodium hypochlorite

LC<sub>50</sub>, 96 hrs, Oncorhynchus gorboscha: > 0.023 - <0.052 mg/l - sodium hypochlorite

LC<sub>50</sub>, 96 hrs, Onchorhynchus tschawyscha: > 0.038 - <0.065 mg/l - sodium hypochlorite

LC<sub>50</sub>, 96 hrs, Herring (Clupea herengus): 0.065 mg/l - sodium hypochlorite

NOEC, 28 d. Menidia peninsulae: 0.04 mg/l - sodium hypochlorite

LC<sub>50</sub>, 48 hrs, Leuciscus idus: 189 mg/l - sodium hydroxide

LC<sub>50</sub>, 96 h, Pimephales promelas: 2.67 - 3.46 mg/l - CAS 308062-28-4 (according to pH)

NOEC, 15 d., Pimephales promelas: 0.495 mg/l - CAS 308062-28-4 (according to pH value)

NOEC, 302 d., Pimephales promelas: 0.42 mg/l - CAS 308062-28-4 (according to pH)

#### ***Daphnia***

Data for the mixture are not available

EC<sub>50</sub>, 48 hrs, Daphnia Magna: 141 µg/l - sodium hypochlorite

NOEC, 48 hrs, Daphnia Magna: 50 µg/l - sodium hypochlorite

EC<sub>50</sub>, 48 hrs, Ceriodaphnia sp.: 40.4 mg/l - sodium hydroxide

EC<sub>50</sub>, 48 hrs, Daphnia Magna: 3.1 mg/l - CAS 308062-28-4

NOEC, 21 d., Daphnia Magna: 0.7 mg/l - CAS 308062-28-4

#### ***Algae***

Data for the mixture are not available

EC<sub>50</sub>, 72 hrs, Pseudokirchneriella subcapitata: 0.36 mg/l - sodium hypochlorite (growth rate)

NOEC, 72 hrs, Pseudokirchneriella subcapitata: 0.005 mg/l - sodium hypochlorite (growth rate)

EC<sub>50</sub>, 72 hrs, Scenedesmus quadricauda: 0.266 mg/l - CAS 308062-28-4 (growth rate)

EC<sub>50</sub>, 72 hrs, Scenedesmus quadricauda: 0.205 mg/l - CAS 308062-28-4 (biomass)

NOEC, 72 hrs, Scenedesmus quadricauda: 0.078 mg/l - CAS 308062-28-4 (growth rate)

### **12.2 Persistence and degradability**

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Data for the mixture are not available

The surfactant (s) contained in this preparation is (are) in compliance with the criteria of biodegradability according to EU Directive No. 648/2004 on detergents.

readily biodegradable: 90 % after 28 days - CAS 308062-28-4 (CO<sub>2</sub> evolution, OECD 301 B)

## 12.3 Bioaccumulative potential

Data for the mixture are not available

## 12.4 Mobility in soil

Data for the mixture are not available

Koc = 307 - > 2 113 - CAS 308062-28-4 (by type of soil)

## 12.5 Results of PBT and vPvB assessment

Mixture or its components are not classified as a PBT or a vPvB.

## 12.6 Other adverse effects

no data available

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

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

Delete according to the applicable European and local regulations (eg. in a hazardous waste incinerator). Never remove flushing into sewer! Do not contaminate ponds or ditches with chemical or used container. Residual amounts and solutions to a licensed disposal company.

For classifying the waste and the removal of waste producer responsibility.

Possible waste code 20 01 29\* - detergents containing dangerous substances

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

Corrosive to metals.

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

None known.

### **Waste legislation**

Directive 2008/98/EC

# SECTION 14: Transport information

## 14.1 UN number

1719

## 14.2 UN proper shipping name

- ADR/RID/IMDG/IATA

CAUSTIC ALKALI LIQUID, N.O.S. (sodium hypochlorite, sodium hydroxide)

## 14.3 Transport hazard class(es)

8

## 14.4 Packing group

II

## 14.5 Environmental hazards

# SAFETY DATA SHEET

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

Date of issue: 26. 11. 2012

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Trade Name: **KRYSTAL Sanan**

mark for environmentally hazardous substances

## 14.6 Special precautions for user

not given

## 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

not available

## Marking according to ADR



## ADR/RID

- classification code	C5
- labels	8
- hazard identification code	80
- tunnel restriction code	E (ADR), - (RID)
- limited quantities	1 l
- excepted quantities	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- transport category	2

## IMDG

- Emergency Schedules (EmS)	F-A/S-B
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## SECTION 15: Regulatory information

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

Regulation No. 1907/2006/ES, REACH.

Regulation No. 1272/2008/ES, CLP.

### 15.2 Chemical safety assessment

No data available.

## SECTION 16: Other information

### Reason for alteration

Change in the classification of the mixture in section 2.

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## ***Key or legend to abbreviations and acronyms used in the safety data sheet***

Acute Tox. 4	Acute toxicity, cat. 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, cat. 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, cat. 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, cat. 2
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 Irrit. 2	Skin irritation, cat. 2
STOT SE 3	Specific target organ toxicity after single exposure, cat. 3
M	Multiplying factor
PBT	Persistent, bioaccumulative, toxic chemical
vPvB	Very persistent and very bioaccumulative chemical
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
CLP	regulation No. 1272/2008/EC
REACH	regulation No. 1907/2006/EC
ADR	Accord Dangereuses Route
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods
ICAO/IATA	International Air Transport Association
VOC	volatile organic compound

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

European legislation, chemical databases and tables, tests, registration dossier of compounds.

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

EUH031	Contact with acids liberates toxic gas.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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.

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P102	Keep out of reach of children.
P260	Do not breathe mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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.
P390	Absorb spillage to prevent material damage.
P501	Dispose of contents/container to in accordance with local national regulation.

### ***Training advice***

According to MSDS.

### ***Relevant information for classification***

According to additional method of CLP. Classification according to data from the manufacturer. The mixture does not have a harmonized classification in the EU. Use only for the purposes designated by the manufacturer, will prevent health and environmental risks.

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