

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: VBSDPXXX98-CLP

Version: 9.0

Date of revision: 05. 12. 2018

Replaced version from: 16. 07. 2018

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Trade Name: **KRYSTAL PINE SANAN**

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

1.1 Product identifier

Trade Name

KRYSTAL PINE 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

Detergent with disinfection and bleaching action.

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 Chronic 3; H412

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. Harmful 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
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts
Sodium hypochlorite
Sodium hydroxide
Amines, C12-14-alkyldimethyl, N-oxides

hazard statements

H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H412 - Harmful 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.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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

Composition: $\geq 30\%$ water, $< 5\%$ anionic surfactants, nonionic surfactants, chlorine-based bleaching agents, sodium hydroxide, perfume and color.
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

<i>Chemical identity</i>	<i>CAS Number EC Number Index Number</i>	<i>Registration Number</i>	<i>Content (wt. %)</i>	<i>Classification 1272/2008/EC</i>
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts*	85586-07-8 287-809-4 not given	01-2119489463-28-XXXX	2.0 - < 3.0	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412

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Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	308062-28-4 931-292-6 not given	01-2119490061-47-XXXX	0.5 - < 1.5	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M=1
Sodium hypochlorite**	7681-52-9 231-668-3 017-011-00-1	01-2119488154-34-XXXX	0.6 - < 0.8	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	0.45 - < 0.55	Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318

*) The substance has a bulk density ≥ 400 g / l. The substance has specific concentration limits: C ≥ 20 %: Eye Dam. 1; H318, 10 % \leq C < 20 %: Eye Irrit. 2; H319.

**) The substance has specific concentration limits: C ≥ 5 %: EUH031.

***) The substance has specific concentration limits: C ≥ 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

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

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. Call physician immediately.

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.

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4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

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

Fire water and the rest of the product must be contained and prevented from being discharged to any waterway, sewer or drain. Collect it separately and dispose of safely in accordance with applicable laws and local regulations.

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

5.3 Advice for firefighters

Stop further leakage of product if possible. 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.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let the product enter drains. 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 (vermikulit, 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

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

Provide good ventilation to prevent the formation of vapor. 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

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

7.3 Specific end use(s)

This product is suitable for food industry, health services, agriculture, wellness or for household use. It removes grease, ingrained dirt and stains. It is suitable for disinfection of heavily used surfaces. It is particularly suitable for toilet bowls, urinals, washbasins, bathtubs, sinks, floors, tiles, work surfaces, drains, etc.

Apply the detergent onto a soiled surface and leave it to react. For better disinfection results, we recommend first removing organic impurities from surfaces and objects to be cleaned and then washing these surfaces and objects with a detergent solution. Finally, rinse the surface with water.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.1.1 Exposure limit value

EU

Chlorine:

Limit values: Eight hours: - mg/m³, - ppm; Short-term: 1.5 mg/m³, 0.5 ppm.

8.1.2 Biological limit values

Not are determined in EU

8.1.3 DNEL and PNEC values

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

CAS: 85586-07-8

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	285 mg/m ³
Workers	Dermal	Systemic effect	Long term	4 060 mg/kg/day
General population	Inhalation	Systemic effect	Long term	85 mg/m ³
General population	Dermal	Systemic effect	Long term	2 440 mg/kg/day
General population	Oral	Systemic effect	Long term	24 mg/kg/day

PNEC

Fresh water	Marine water	Intermittent releases	STP	Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.131 mg/l	0.013 mg/l	0.036 mg/l	1.35 mg/l	4.61 mg/kg	0.461 mg/kg	no effect	0.846 mg/kg	no effect

Sodium hypochlorite

CAS: 7681-52-9

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	1.55 mg/m ³
Workers	Inhalation	Systemic effect	Acute/short term	3.1 mg/m ³
Workers	Inhalation	Local effect	Long term	1.55 mg/m ³
Workers	Inhalation	Local effect	Acute/short term	3.1 mg/m ³

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General population	Inhalation	Systemic effect	Long term	1.55 mg/m ³
General population	Inhalation	Systemic effect	Acute/short term	3.1 mg/m ³
General population	Inhalation	Local effect	Long term	1.55 mg/m ³
General population	Inhalation	Local effect	Acute/short term	3.1 mg/m ³
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
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/m ³
General population	Inhalation	Local effect	Long term	1 mg/m ³

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/m ³
Workers	Dermal	Systemic effect	Long term	11 mg/kg/day
General population	Inhalation	Systemic effect	Long term	1.53 mg/m ³
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 a fire use self-contained breathing apparatus.

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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

Wear safety goggles or shield.

Skin protection

Suitable protective working 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.

8.2.3 Environmental exposure reduction

Uncontrolled release of the substance/formulation into environment is to be avoided. Observe the emission limits.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance (at 20 C)	liquid, green
Odour	characteristic, fresh odour of camphor, mint, fruit
Odour threshold	not determined
pH (at 20 C)	13.014 (concentrated)
pH (at 20 C)	11.419 (1% solution)
Melting point/freezing point	not determined
Boiling point (range)	100 C
Flash point	not determined
Evaporation rate	not determined
Flammability	not determined
Explosive limits	
lower (% vol.)	not determined
upper (% vol.)	not determined
Vapour pressure (at 20 C)	23 hPa
Vapour density	not determined
Relative density	1.0218 (water = 1)
Solubility in water (at 20 C)	soluble
Solubility in organic solvents:	not determined
Partition coefficient: n-octanol/water	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not determined
Viscosity	not determined
Explosive properties	is not classified as explosive
Oxidising properties	is not classified as an oxidant

9.2 Other information

Organic solvents	0.0 %
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Water	95.2 %
VOC	0.0 %
Content of non-volatile components	3.4 %
Alkalinity	0.3882 %

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.

10.3 Possibility of hazardous reactions

Reaction with acids releases toxic gases.

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, sulphur oxides, hydrogen sulphide, 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_{50} oral, rat (mg/kg)

Data for the mixture are not available

> 32 608 - calculation according to the additive formula

ATE = 1 800 - CAS 85586-07-8 (according to registration dossier)

1 100 - sodium hypochlorite (as Cl₂, male)

1 064 - CAS 308062-28-4

- LD_{50} skin, rat or rabbit (mg/kg)

Data for the mixture are not available

> 2 000 - CAS 85586-07-8 (rat)

> 20 000 - sodium hypochlorite (rabbit)

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

- LC_{50} inhalation, rat (mg/l, 4 h)

Data for the mixture are not available

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

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Skin corrosion/irritation

Causes severe skin burns and eye damage due to high pH value and surfactants content.

classified as irritant - mean erythema score = 2.2 (not fully reversible after 72 hours) and edema = 1.7 (not fully reversible after 72 hours) - CAS 85586-07-8 (rabbit, 72 h, OECD 404)

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)

Serious eye damage/irritation

Causes severe eye damage due to high pH value and surfactants content.

classified as seriously damaging the eyes, the mean score of corneal opacity = 2.3 (not fully reversible after 7 days), iritis = 1 (not fully reversible after 7 days), the redness of conjunctival = 2.3 (not fully reversible after 7 days) conjunctival edema = 2.9 (not fully reversible after 7 days) - CAS 85586-07-8 (rabbit, 72 h, OECD 405).

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 - CAS 85586-07-8 (guinea pig, maximization test)

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)

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Carcinogenicity

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

NOEL \geq 1 125 mg/kg/day - CAS 85586-07-8 (rat, oral, OECD 453)

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 - CAS 85586-07-8 (OECD 471, OECD 476)

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 \geq 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 \geq 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

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

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Other information

See section 2 and 4.

SECTION 12: Ecological information

12.1 Toxicity

Fish

Data for the mixture are not available

LC₅₀, 96 hrs., Oncorhynchus mykiss: 3.6 mg/l - CAS 85586-07-8

NOEC, 96 hrs., Oncorhynchus mykiss: 1.8 mg/l - CAS 85586-07-8

LC₅₀, 96 hrs, Oncorhynchus kisutch: 0.032 mg/l - sodium hypochlorite

LC₅₀, 96 hrs, Oncorhynchus gorbuscha: > 0.023 - <0.052 mg/l - sodium hypochlorite

LC₅₀, 96 hrs, Onchorhynchus tschawytscha: > 0.038 - <0.065 mg/l - sodium hypochlorite

LC₅₀, 96 hrs, Herring (Clupea herengus): 0.065 mg/l - sodium hypochlorite

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

LC₅₀, 48 hrs, Leuciscus idus: 189 mg/l - sodium hydroxide

LC₅₀, 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

EC₅₀, 48 hrs., Daphnia Magna: 4.7 mg/l - CAS 85586-07-8

NOEC, 48 hrs., Daphnia Magna: 2.5 mg/l - CAS 85586-07-8

EC₅₀, 48 hrs, Daphnia Magna: 141 µg/l - sodium hypochlorite

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

EC₅₀, 48 hrs, Ceriodaphnia sp.: 40.4 mg/l - sodium hydroxide

EC₅₀, 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

EC₅₀, 72 hrs., Desmodesmus subspicatus: > 20 mg/l - CAS 85586-07-8 (growth rate)

EC₅₀, 72 hrs., Desmodesmus subspicatus: 12 mg/l - CAS 85586-07-8 (biomass)

EC₁₀, 72 hrs., Desmodesmus subspicatus: 5.4 mg/l - CAS 85586-07-8 (growth rate)

EC₁₀, 72 hrs., Desmodesmus subspicatus: 2 mg/l - CAS 85586-07-8 (biomass)

EC₅₀, 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)

EC₅₀, 72 hrs, Scenedesmus quadricauda: 0.266 mg/l - CAS 308062-28-4 (growth rate)

EC₅₀, 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

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 - 100 % after 28 dní - CAS 85586-07-8 (O₂ consumption, OECD 301 D)

readily biodegradable: 90 % after 28 days - CAS 308062-28-4 (CO₂ evolution, OECD 301 B)

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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

not given

14.6 Special precautions for user

not given

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

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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 labeling and concentration of ingredients in section 3. Additional information in section 9.

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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
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, 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 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.
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.
H412	Harmful 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.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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

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.

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