

# Safety data sheet



Revision nr. 1  
Dated 14/12/2018  
Printed on 14/12/2018

EN

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

### 1.1. Product identifier

Product name PINKEEPER  
Code: 294006020-EU

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

Intended use Bowling Cleaner - ONLY PROFESSIONAL USE  
Uses advised against Uses other than those stated.

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

Name. EUROPEAN BOWLING DISTRIBUTION  
Full address. Brieltjenspolder 42  
District and Country. 4921 PJ - Made  
The Netherlands  
Tel : +31(0)162-671084  
Email: info@eurbowdis.eu

e-mail address of the competent person.  
responsible for the Safety Data Sheet.  
EU-Chemicals@qubicaamf.com

### 1.4. Emergency telephone number.

For urgent inquiries refer to.  
For United Kingdom 111 (NHS Sevice)  
For Ireland +353 01 809 2166 (8 AM - 10 PM. 24h only for doctors)  
ChemTel 24-hour Emergency Numbers +1-813-248-0585

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

### 2.2. Label elements

Substance or mixture corrosive to metals, category 1	H290	May be corrosive to metals.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: **Danger**

Hazard statements:

**H290**

May be corrosive to metals.

**H314**

Causes severe skin burns and eye damage.

Precautionary statements:

**P280**

Wear protective gloves / 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

**P234**

Keep only in original packaging.

**Contains:** SODIUM METASILICATE, PENTAHYDRATE

Ingredients according to Regulation (EC) No. 648/2004

Less than 5% non-ionic surfactants

### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

## SECTION 3. Composition/information on ingredients

### 3.1. Substances

Information not relevant

### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>ALCOHOLS, C9-11 ETHOXYLATED, &lt; 2.5 EO</b>		
CAS 68439-46-3	1 ≤ x < 1,5	Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412

EC 614-482-0

INDEX -

## SODIUM METASILICATE, PENTAHYDRATE

CAS 10213-79-3 1 ≤ x < 1,5 Met. Corr. 1 H290, Skin Corr. 1B H314, STOT SE 3 H335

EC 229-912-9

INDEX 014-010-00-8

Reg. no. 01-2119449811-37-XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

PROTECTIVE MEASURES FOR THE FIRST RESCUE WORKERS: for PPE (personal protection equipment) required for first aid refer to section 8.2 of this safety data sheet.

### 4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

### 4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

### 5.3. Advice for firefighters

## GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

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

For those who do not intervene directly  
Evacuate untrained personnel.

Do not inhale the vapors. Avoid dispersion of the product in the environment. Follow appropriate internal procedures for personnel not authorized to intervene directly in case of accidental release.

For those who intervene directly

Wear appropriate protective equipment (including personal protective equipment referred to in Section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. Follow appropriate internal procedures for personnel authorized to intervene directly in case of accidental release. Check the fumes / vapors.

Remove unattended persons. Eliminate any source of ignition (cigarettes, flames, sparks, etc.) or heat from the area in which the leak occurred.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

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

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

### 7.3. Specific end use(s)

No use other than specified in Section 1.2 of this safety data sheet.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

SODIUM METASILICATE, PENTAHYDRATE		
Predicted no-effect concentration - PNEC		
Normal value in fresh water	7,5	mg/l
Normal value in marine water	1	mg/l
Normal value of STP microorganisms	1000	mg/l

Health - Derived no-effect level - DNEL / DMEL								
Effects on consumers					Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Chronic local	Acute local	Acute systemic	Chronic systemic
Oral				0,74 mg/kg bw/d				
Inhalation				1,55 mg/m <sup>3</sup>				6,22 mg/m <sup>3</sup>
Skin				0,74 mg/kg bw/d				1,49 mg/kg bw/d

Legend:

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

#### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

Use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are

not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	colourless
Odour	mild
Odour threshold	Not available
pH	12,8
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	> 60 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	> 1
Relative density	1,00
Solubility	soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

### 9.2. Other information

Information not available

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use. SODIUM METASILICATE, PENTAHYDRATE: aqueous solutions behave like strong bases; they can attack aluminium, zinc, tin and their alloys.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.  
SODIUM METASILICATE, PENTAHYDRATE  
Reacts violently developing heat on contact with: acids.  
Develops hydrogen on contact with: aluminium,tin,zinc,copper,zinc alloys,tin alloys,copper alloys,aluminium alloys.

#### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

SODIUM METASILICATE, PENTAHYDRATE

Avoid contact with: concentrated inorganic acids.

#### 10.5. Incompatible materials

ODIUM METASILICATE, PENTAHYDRATE

Incompatible materials: aluminium,aluminium alloys,tin alloys,zinc alloys,copper alloys,copper,zinc,tin.

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Acids, alkalis, halogens, caustics, reactive chemical compounds.

#### 10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

## SECTION 11. Toxicological information

#### 11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

SODIUM METASILICATE, PENTAHYDRATE:

Rapidly absorbed through the digestive tract and excreted in the urine.

#### Information on likely routes of exposure

Information not available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

SODIUM METASILICATE, PENTAHYDRATE

For oral administration, rats showed stomach and duodenal bleeding and erosion of the small intestine. The dog and the pig, on the other hand, lesions of the upper digestive tract (acute ulcerative necrosis of the epithelial wall), lungs (edema) and kidneys (necrosis of the proximal renal tubes). These effects are independent of the age of the animal and the alkalinity of the substance.

Inhalation of dust may cause irritation of the respiratory tract and corrosive lesions of the olfactory mucosa.

A 6% solution, applied to the mouse skin, causes significant irritation and a positive hypersensitivity response in the MEST (ear swelling) test. (INRS 2016).

Ingestion of 500 ml of an egg-preserving solution containing sodium silicate in suicidal intention led to death of a 68 year old woman within 1 hour by suffocation.

Aspiration of the vomited silicate solution caused obstruction of the lungs by precipitation of amorphous silica. The transformation of sodium silicate from liquid to solid occurred in the lungs by means of the carbonic acid of expiration air.(Schleyer WL and Blumberg JG (1982). Health, safety and environmental aspects of soluble silicates.).

#### Interactive effects

Information not available

#### ACUTE TOXICITY

Does not meet the classification criteria for this hazard class

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Method: equivalent or similar to OECD 401, read across

Reliability (Klimisch score): 2

Species: rat (Wistar Male/Female)

Route of administration: oral

Results DL50: 3488 mg/kg

Method: equivalent or similar to OECD 403, read across

Reliability (Klimisch score): 2

Species: rat (Wistar Male/Female)

Route of administration: inhalation (vapour)

Results CL50: > 0,1 mg/l 6h (vapour)

Method: equivalent or similar to OECD 402, read across

Reliability (Klimisch score): 2

Species: rat (Wistar Male/Female)

Route of administration: dermal

Results DL50: > 2000 mg/kg.

SODIUM METASILICATE, PENTAHYDRATE

Acute toxicity (oral):

Method: not indicated

Reliability (Klimisch score): 2

Species: Mouse (T23-48;ddy; male/female)

Route of administration: oral

Results: LD50= 661.5 mg/kg bw (solution 10%)

Reference: Ito, R. et al., Toxicol. Lett. 31 (Suppl. P1-28), 1986

Acute toxicity (inhalation):

Method: EPA OPPTS 870.1300 - Read Across with similar substance

Reliability (Klimisch score): 1

Species: Rat (Sprague-Dawley; male/female)

Route of administration: inhalation

Results: LC50 > 2.06 mg/L air

Acute toxicity (dermal):

Method: EPA OPPTS 870.1200 - Read Across with similar substance

Reliability (Klimisch score): 1

Species: Rat (Sprague-Dawley; male/female)

Route of administration: dermal

Results: LD50 > 5 000 mg/kg bw.

#### SKIN CORROSION / IRRITATION

Corrosive for the skin

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Method: OECD 404, read across

Reliability (Klimisch score): 2

Species: white rabbit (New Zealand)

Results: not irritating.

SODIUM METASILICATE, PENTAHYDRATE

Highly corrosive. Cellular and tissue dehydration reactions and lipid saponification can occur.

Method: OECD 404

Reliability (Klimisch score): 2

Species: Rabbit (New Zealand White)

Route of administration: dermal

Results: corrosive.

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Method: OECD 405, read across

Reliability (Klimisch score): 2

Species: white rabbit (New Zealand)

Degree of ethoxylation: 1.4

Results: causes eye damage Cat. 2.

Method: OECD 405, read across

Reliability (Klimisch score): 2

Species: white rabbit (New Zealand)

Degree of ethoxylation: 2

Results: causes eye damage Cat. 1.

SODIUM METASILICATE, PENTAHYDRATE

Concentrations  $\geq$  10% are considered corrosive to the eyes (INRS 2016).

#### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Respiratory sensitization

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Data not available.

SODIUM METASILICATE, PENTAHYDRATE

Data not available.

Skin sensitization

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Method: equivalent or similar to OECD 406, read across

Reliability (Klimisch score): 2

Species: guinea pig. (Breeding Unit 'P' Strain male/female)

Results: not sensitizing.

SODIUM METASILICATE, PENTAHYDRATE

A 6% solution, applied to the mouse skin, causes significant irritation and a positive hypersensitivity response in the MEST (ear swelling) test. A small increase in cell proliferation, without achieving statistical significance, is observed in the LLNA assay (Cellular Lymphocyte Cell Growth) as well as an increase in the B cell lymphocyte populations of the ganglia. Based on these results, the authors evaluate disodium metasilicate as a weak allergen. (INRS 2016).

A fifty-seven year old man was regularly exposed at work to 20 % sodiumsilicate solution of unknown molar ratio. The man had recurrent ulcerative lesions on his left hand over a period of two years. The ulcers were associated with chronic eczematous changes resulting from primary irritant contact dermatitis to sodium silicate, as indicated by a positive patch test. The man also had another type of cutaneous reaction to sodium silicate, contact urticaria. An immediate wheal and flare reaction was seen fifteen minutes after the application of sodium silicate to a scratch test site. Such a response was not seen in healthy control subjects. (Tanaka T et al., Arch. Dermatol. 118, 1982).

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Method: equivalente o similare a OECD 473, read across (Alcool dodecilico)

Reliability (Klimisch score): 2

In vitro test

Species: Chinese hamster (ovaries)

Results: negative with and without metabolic activation

Test in vivo: Data not available.

SODIUM METASILICATE, PENTAHYDRATE

In vitro test:

Method: OECD 473 - Read Across with similar substance

Reliability (Klimisch score): 1

Species: Chinese hamster lung fibroblasts

Results: negative with and without metabolic activation  
Method: OECD 471  
Reliability (Klimisch score): 1  
Species: S. typhimurium TA 1535, TA 1537, TA 98, TA 100 and E. coli WP2  
Results: negative with and without metabolic activation  
In vivo test:  
Method: OECD 475  
Reliability (Klimisch score): 2  
Species: Mouse (BDF1; male)  
Route of administration: oral  
Results: negative

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Data not available.

SODIUM METASILICATE, PENTAHYDRATE

The substance is a corrosive agent and, as such, would increase the chances of causing cancer of the squamous cells of the esophagus. However, the rat exposed to drinking water for two years ( $\geq 792$  mg / kg / day) has no increase in tumors (INRS 2016).

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

SODIUM METASILICATE, PENTAHYDRATE

Method: not indicated - Read Across with similar substance

Reliability (Klimisch score): 2

Species: Rat (Sprague-Dawley; male/female)

Route of administration: oral

Results: NOAEL (parental) > 159 mg/kg bw/day;

Reference: J. Smith, G. S. et al., Animal Sc. 36, 1973.

Adverse effects on sexual function and fertility

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Method: equivalent or similar to OECD 416

Reliability (Klimisch score): 2

Species: rat (Fischer 344 male/female)

Route of administration: dermal

Results NOAEL (reprotoxicity)(P/F1): > 250 mg/kg body weight / day

Results NOAEL (development)(F1/F2): > 250 mg/kg body weight / day

Results NOEL (systemic)(P/F1): 100 mg/kg body weight / day

Results NOAEL (systemic)(P/F1): > 250 mg/kg body weight / day

The substance showed no toxicity effects for fertility and / or sexual function by the dermal route.

SODIUM METASILICATE, PENTAHYDRATE

Method: not indicated

Reliability (Klimisch score): 2

Species: Mouse (ddy-SLC)

Route of administration: oral

Results: No effects on reproductive organs upon microscopic examination and wet weight determination.

Reference: Saiwai, K. et al., Internal Report Toho University, 1980.

Adverse effects on development of the offspring

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Method: equivalent or similar to OECD 416

Reliability (Klimisch score): 2

Species: rat (Fischer 344)

Route of administration: dermal

Results NOAEL (development): > 250 mg/kg body weight / day

Results NOEL (mother): 100 mg/kg body weight / day

Results NOAEL (mother): > 250 mg/kg body weight / day

The substance showed no toxic effects on the development of progeny by the dermal route.

SODIUM METASILICATE, PENTAHYDRATE

Method: not indicated

Reliability (Klimisch score): 2

Species: Mouse (JLC-TCR)

Route of administration: oral

Results: NOAEL (mother)= 12.5 mg/kg bw/day; NOAEL (development) > 200 mg/kg bw/day

Reference: Saiwai, K. et al., Internal Report Toho University, 1980.

#### STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Based on the available data, the substance has no specific target organ toxicity effects for single exposure and is not classified under the relevant CLP hazard class.

SODIUM METASILICATE, PENTAHYDRATE

The hygroscopic property of the substance and its rapid solubilization in water allow this, if inhaled, to dissolve in the mucosa of the upper respiratory tract. Therefore, the effects would be limited to local corrosive / irritant effects due to the intrinsic alkalinity of sodium metasilicate. Furthermore, acidification at pH lower than 11 or 12 leads to the precipitation of sodium metasilicate and transformation into amorphous silica. (OECD SIDS April 2004) The substance is classified as a specific target organ toxicant. Cat. 3.

Target organ: Respiratory System.

Route of exposure: Inhalation.

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Method: equivalent or similar to OECD 408, read across (alcohols, C14-15 ethoxylated)

Reliability (Klimisch score): 2

Species: ratto (Wistar male/female)

Route of administration: oral

Results NOAEL (systemic): > 500 mg/kg body weight / day

SODIUM METASILICATE, PENTAHYDRATE

8 (by gender) Beagle dogs and 15 rats (per sex) received an oral dose of 2400 mg / kg body weight for four weeks. The study was similar to OECD 407. Symptoms of polydipsia, poluria and liquid stool were found in several testers. The test was carried out with sodium silicate. (OECD SIDS April 2004)

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

Data not available.

SODIUM METASILICATE, PENTAHYDRATE

Data not available.

## SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO

LC50 - for Fish

5 mg/l/96h *Oncorhynchus mykiss*; no guidelines, study report (1979)

EC50 - for Crustacea

2,5 mg/l/48h *Daphnia magna*; no guidelines, study report (1985)

### 12.2. Persistence and degradability

ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO: Rapidly degradable, 72% in 28d (ISO 14593).

### 12.3. Bioaccumulative potential

Information not available

### 12.4. Mobility in soil

Information not available

### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### 12.6. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## SECTION 14. Transport information

### 14.1. UN number

ADR / RID, IMDG, IATA: 3253

### 14.2. UN proper shipping name

ADR / RID: DISODIUM TRIOXOSILICATE SOLUTION  
IMDG: DISODIUM TRIOXOSILICATE SOLUTION  
IATA: DISODIUM TRIOXOSILICATE SOLUTION

### 14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8  
 IMDG: Class: 8 Label: 8  
 IATA: Class: 8 Label: 8



None

Substances subject to the Rotterdam Convention:

None

### 14.4. Packing group

ADR / RID, IMDG, IATA: III

Substances subject to the Stockholm Convention:

None

### 14.5. Environmental hazards

ADR / RID: NO  
 MDG: NO  
 IATA: NO

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

### 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 80 Limited Quantities: 5 kg Tunnel restriction code: (E)  
 Special Provision: -  
 IMDG: EMS: F-A, S-B Limited Quantities: 5 kg  
 IATA: Cargo: Maximum quantity: 100 Kg Packaging instructions: 864  
 Pass.: Maximum quantity: 25 Kg Packaging instructions: 860  
 Special Instructions: A803

Regulation (EC) No. 648/2004

Ingredients according to Regulation (EC) No. 648/2004  
 The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.  
 ALCOHOLS, C9-11 ETHOXYLATED, < 2.5 EO:  
 Full biodegradability: 90.81 % in 28 days  
 Method: OECD 301B  
 Test report n°: 17LA04922 of 25/10/2017.

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

Information not relevant

German regulation on the classification of substances hazardous to water (VwVwS 2005)

WGK 1: Low hazard to waters

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: None  
 Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

### 15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

Product

Point 3.

Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/ 2008:  
 (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;  
 (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;  
 (c) hazard class 4.1;  
 (d) hazard class 5.1.

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

## SECTION 16. Other information

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]**

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Substance or mixture corrosive to metals, category 1, H290 - May be corrosive to metals.	Expert judgement
Skin corrosion, category 1B, H314 - Causes severe skin burns and eye damage.	Calculation method
Serious eye damage, category 1, H318 - Causes serious eye damage.	Calculation method

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Skin Corr. 1B	Skin corrosion, category 1B

Eye Dam. 1	Serious eye damage, category 1
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)

13. Regulation (EU) 2017/776 (X Atp. CLP)

- The Merck Index. - 10th Edition

- Handling Chemical Safety

- INRS - Fiche Toxicologique (toxicological sheet)

- Patty - Industrial Hygiene and Toxicology

- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

- IFA GESTIS website

- ECHA website

- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for the recipient of the Safety Data Sheet (SDS):**

The recipient of this SDS shall make sure of reading and understanding the information included by all people who handle, store, use, or otherwise come into contact in any way with the substance or mixture to which this SDS is referred to. In particular, the recipient shall provide adequate training to the personnel for the use of hazardous substances and/or mixtures. The recipient shall verify the suitability and completeness of the provided information according to the specific use of the substance or mixture.

However, the substance or mixture referred to by this SDS shall not be used for uses other than those specified in Section 1. The Supplier don't assume responsibility for improper uses. Since the use of the product does not fall under the direct control of the Supplier, the user shall, under his own responsibility, fulfill national and EU regulations concerning health and safety.

The information included in this SDS are provided in good faith and are based on the current state of scientific and technical knowledge, at the revision date indicated, available to the Supplier indicated in Section 1 of this SDS. It shall not be meant that the SDS is a guarantee of any specific property of the substance or mixture. The information concern only to the substance or mixture specifically designated in Section 1 and it could not be valid for the substance or mixture used in combination with other materials or in any process not specified in the text.

This version of the SDS substitutes all the previous versions.