

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: KiiltoClean Oy - F 15 Hite - 60180,60181,60182,3105075 3105075

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

Relevant uses: Disinfecting, strongly alkaline chlorine detergent with foam for food industry. For professional user/industrial user only.

Uses advised against (Professional user): not defined

1.3 Details of the supplier of the safety data sheet:

KiiltoClean Oy Tengströminkatu 6 PL157, 20101 Turku - FINLAND Phone.: +358 (0) 207710400 asiakaspalvelu@kiiltoclean.fi www.kiiltoclean.fi

1.4 Emergency telephone number: Poison advisory center in Finland: +358 9 471 977

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410

Met. Corr. 1: Corrosive to metals, Category 1, H290 Skin Corr. 1A: Skin corrosion, Category 1A, H314

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger



Hazard statements:

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects Met. Corr. 1: H290 - May be corrosive to metals Skin Corr. 1A: H314 - Causes severe skin burns and eye damage

Precautionary statements:

P280: Wear protective gloves/protective clothing/eye protection/face protection P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P313: Get medical advice/attention P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

Supplementary information:

EUH031: Contact with acids liberates toxic gas

Substances that contribute to the classification

Sodium hydroxide (CAS: 1310-73-2); sodium hypochlorite, solution ... % Cl active (CAS: 7681-52-9)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

** Changes with regards to the previous version

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:
 - Non-applicable
- 3.2 Mixture:



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Chemical description: Disolved hypochlorites

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| | Identification | | Chemical name/Classification | Concentration | |
|--|----------------------|------------------------------|---|---------------|--|
| | | Sodium hydroxide 1 ATP CLP00 | | | |
| EC: 215-185-5 Index: Non-applicable REACH: 01-2119457892-27-XXXX | Regulation 1272/2008 | Skin Corr. 1A: H314 - Danger | 5 - <15 % | | |
| CAS: | | sodium hypochlorite, | solution % Cl active 1 Self-classified | | |
| EC: 231-668-3 Index: Non-applicable REACH: 01-2119488154-34-XXXX | Non-applicable | Regulation 1272/2008 | Aquatic Acute 1: H400; Eye Dam. 1: H318; Met. Corr. 1: H290; Skin Corr. 1B: H314; STOT SE 3: H335; EUH031 - Danger | 1 - <5 % | |
| | | Amines, C12-18 alky | dimethyl, N-oxides 1 Self-classified | | |
| EC: 263-016-9 Index: Non-applicable REACH: Non-applicable | Non-applicable | Regulation 1272/2008 | Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger | 1 - <5 % | |
| CAS: 37971-36-1 | | 2-Phosphonobutane- | 1,2,4-tricarboxylic acid 1 Self-classified | | |
| EC: 253-733-5 Index: Non-applicable REACH: 01-2119436643-39-XX | Non-applicable | Regulation 1272/2008 | Eye Irrit. 2: H319; Met. Corr. 1: H290 - Warning | 1 - <5 % | |

□1□ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.



SECTION 5: FIREFIGHTING MEASURES (continued)

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

- A.- Technical measures for storage
 - Minimum Temp.: 5 °C

Maximum Temp.: 25 °C

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

Other information:



SECTION 7: HANDLING AND STORAGE (continued)

Keep tightly closed in a dry, cool and well-ventilated place.

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

| | | Environmental limits | | |
|--|------------|----------------------|-----------------------|--|
| sodium hypochlorite, solution % Cl active IOEL | DELV (8h) | | | |
| CAS: 7681-52-9 EC: 231-668-3 IOELV | ELV (STEL) | 0.5 ppm | 1.5 mg/m ³ | |

DNEL (Workers):

| | | Short e | exposure | Long e | xposure |
|--|------------|-----------------------|-----------------------|------------------------|------------------------|
| Identification | | Systemic | Local | Systemic | Local |
| Sodium hydroxide | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 1310-73-2 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 215-185-5 | Inhalation | Non-applicable | Non-applicable | Non-applicable | 1 mg/m ³ |
| sodium hypochlorite, solution % Cl active | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 7681-52-9 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 231-668-3 | Inhalation | 3,1 mg/m ³ | 3,1 mg/m ³ | 1,55 mg/m ³ | 1,55 mg/m ³ |
| 2-Phosphonobutane-1,2,4-tricarboxylic acid | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 37971-36-1 | Dermal | 80 mg/kg | Non-applicable | 4,2 mg/kg | Non-applicable |
| EC: 253-733-5 | Inhalation | 158 mg/m ³ | Non-applicable | 15 mg/m ³ | Non-applicable |

DNEL (General population):

| | Short e | exposure | Long e | xposure | |
|--|------------|-----------------------|-----------------------|------------------------|------------------------|
| Identification | | Systemic | Local | Systemic | Local |
| Sodium hydroxide | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| CAS: 1310-73-2 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 215-185-5 | Inhalation | Non-applicable | Non-applicable | Non-applicable | 1 mg/m ³ |
| sodium hypochlorite, solution % Cl active | Oral | Non-applicable | Non-applicable | 0,26 mg/kg | Non-applicable |
| CAS: 7681-52-9 | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| EC: 231-668-3 | Inhalation | 3,1 mg/m ³ | 3,1 mg/m ³ | 1,55 mg/m ³ | 1,55 mg/m ³ |
| 2-Phosphonobutane-1,2,4-tricarboxylic acid | Oral | 65 mg/kg | Non-applicable | 2,1 mg/kg | Non-applicable |
| CAS: 37971-36-1 | Dermal | 40 mg/kg | Non-applicable | 2,1 mg/kg | Non-applicable |
| EC: 253-733-5 | Inhalation | 79 mg/m ³ | Non-applicable | 3,7 mg/m ³ | Non-applicable |

PNEC:

| Identification | | | | |
|--|--------------|----------------|-------------------------|----------------|
| sodium hypochlorite, solution % Cl active | STP | 0,03 mg/L | Fresh water | 0,00021 mg/L |
| CAS: 7681-52-9 | Soil | Non-applicable | Marine water | 0,000042 mg/L |
| EC: 231-668-3 | Intermittent | 0,00026 mg/L | Sediment (Fresh water) | Non-applicable |
| | Oral | 11,1 g/kg | Sediment (Marine water) | Non-applicable |
| 2-Phosphonobutane-1,2,4-tricarboxylic acid | STP | 50,4 mg/L | Fresh water | 3,33 mg/L |
| CAS: 37971-36-1 | Soil | 0,491 mg/kg | Marine water | 0,33 mg/L |
| EC: 253-733-5 | Intermittent | 10,42 mg/L | Sediment (Fresh water) | 1,47 mg/kg |
| | Oral | 90 g/kg | Sediment (Marine water) | Non-applicable |

8.2 Exposure controls:

A.- General security and hygiene measures in the work place



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks | | | | |
|---|-----------------------------------|-----------|---------------------|--|--|--|--|--|
| Compulsory use of face mask | Filter mask for particles | | EN 149:2001+A1:2009 | Replace when an increase in resistence to breathing is observed. | | | | |
| Specific protection | Specific protection for the hands | | | | | | | |

C.- Specifi

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|------------------------------|--|-----------|---|--|
| Mandatory hand protection | NON-disposable chemical protective gloves | | EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009 | The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. |

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|------------------------------|--|-----------|---|--|
| Mandatory face protection | Face shield | | EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2012 | Clean daily and disinfect periodically according to the manufacturer 's instructions. Use if there is a risk of splashing. |
| Mandatory face protection | Panoramic glasses against splash/projections. | | EN 166:2001 EN ISO 4007:2012 | Clean daily and disinfect periodically according to the manufacturer 's instructions. Use if there is a risk of splashing. |

E.- Body protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|------------------------------|--|-----------|--------------------------------------|--|
| Mandatory foot protection | Safety footwear for protection against chemical risk | | EN ISO 20345:2011 EN 13832-1:2006 | Replace boots at any sign of deterioration. |
| | Work clothing | CATI | | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2001, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994. |

F.- Additional emergency measures

| 4 , | | | |
|-------------------|--------------------------------|-------------------|-------------------------------|
| Emergency measure | Standards | Emergency measure | Standards |
| Emergency shower | ANSI Z358-1 ISO 3864-1:2002 | Evewash stations | DIN 12 899 ISO 3864-1:2002 |

As needed, Respiratory protection according to EN143: P2. Protective gloves complying with EN374: butylrubber, nitrile rubber, natural rubber, PVC. Breakthrough time \geq 480 min, material thickness \geq 0,7 mm.

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



| 9.1 | IION 9: PHYSICAL AND CHEMICAL PROPER Information on basic physical and chemical | |
|-----|--|--|
| 5.2 | Appearance: | |
| | Physical state at 20 °C: | Liquid |
| | Appearance: | Transparent |
| | Colour: | Yellowish |
| | Odour: | Chlorine |
| | Odour threshold: | Non-applicable * |
| | Volatility: | |
| | Boiling point at atmospheric pressure: | Non-applicable * |
| | Vapour pressure at 20 °C: | Non-applicable * |
| | Vapour pressure at 50 °C: | 92,87 (12,38 kPa) |
| | Evaporation rate at 20 °C: | Non-applicable * |
| | Product description: | |
| | Density at 20 °C: | 1170 kg/m³ |
| | Relative density at 20 °C: | 1,17 |
| | Dynamic viscosity at 20 °C: | Non-applicable * |
| | Kinematic viscosity at 20 °C: | Non-applicable * |
| | Kinematic viscosity at 40 °C: | Non-applicable * |
| | Concentration: | Non-applicable * |
| | pH: | 14 |
| | Vapour density at 20 °C: | Non-applicable * |
| | Partition coefficient n-octanol/water 20 °C: | Non-applicable * |
| | Solubility in water at 20 °C: | Non-applicable * |
| | Solubility properties: | Highly water-soluble |
| | Decomposition temperature: | Non-applicable * |
| | Melting point/freezing point: | Non-applicable * |
| | Explosive properties: | Non-applicable * |
| | Oxidising properties: | Non-applicable * |
| | Flammability: | |
| | Flash Point: | Non Flammable (>60 °C) |
| | Flammability (solid, gas): | Non-applicable * |
| | Autoignition temperature: | Non-applicable * |
| | Lower flammability limit: | Non-applicable * |
| | Upper flammability limit: | Non-applicable * |
| | Explosive: | |
| | Lower explosive limit: | Non-applicable * |
| | Upper explosive limit: | Non-applicable * |
| 9.2 | Other information: | |
| | Surface tension at 20 °C: | Non-applicable * |
| | Refraction index: | Non-applicable * |
| | *Not relevant due to the nature of the product, not providing | g information property of its hazards. |

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.



SECTION 10: STABILITY AND REACTIVITY (continued)

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|--------------------|------------------|-------------------------|----------------|----------------|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

10.5 Incompatible materials:

| Avoid strong acids Not applicable Precaution | Not applicable | NH3, Produces toxic gases |
|--|----------------|---------------------------|

Light metals. Contact with acids liberates toxic gas.

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified
- as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Can be fatal after prolonged periods of exposure, as it releases toxic gases when it comes into contact with acids

- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.

- Contact with the eyes: Produces serious eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

IARC: Non-applicable

- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.

- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:



SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

| Identification | Acute toxicity | | Genus |
|---|-----------------|------------------|-------|
| Amines, C12-18 alkyldimethyl, N-oxides | LD50 oral | 500 mg/kg (ATEi) | |
| CAS: 61788-90-7 | LD50 dermal | Non-applicable | |
| EC: 263-016-9 | LC50 inhalation | Non-applicable | |
| sodium hypochlorite, solution % Cl active | LD50 oral | 8910 mg/kg | Rat |
| CAS: 7681-52-9 | LD50 dermal | Non-applicable | |
| EC: 231-668-3 | LC50 inhalation | Non-applicable | |

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

| Identification | | Acute toxicity | Species | Genus |
|---|------|---------------------|-----------------|------------|
| Sodium hydroxide | LC50 | 189 mg/L (48 h) | Leuciscus idus | Fish |
| CAS: 1310-73-2 | EC50 | 33 mg/L | Crangon crangon | Crustacean |
| EC: 215-185-5 | EC50 | Non-applicable | | |
| sodium hypochlorite, solution % Cl active | LC50 | 0.1 - 1 mg/L (96 h) | | Fish |
| CAS: 7681-52-9 | EC50 | 0.1 - 1 mg/L (48 h) | | Crustacean |
| EC: 231-668-3 | EC50 | 0.1 - 1 mg/L | | Algae |
| Amines, C12-18 alkyldimethyl, N-oxides | LC50 | 0.1 - 1 mg/L (96 h) | | Fish |
| CAS: 61788-90-7 | EC50 | 0.1 - 1 mg/L | | Crustacean |
| EC: 263-016-9 | EC50 | 0.1 - 1 mg/L | | Algae |

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:

Not available

12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:



SECTION 13: DISPOSAL CONSIDERATIONS (continued)

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|-----------|--|---|
| 07 04 04* | other organic solvents, washing liquids and mother liquors | Dangerous |

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP12 Release of an acute toxic gas, HP4 Irritant — skin irritation and eye damage, HP8 Corrosive

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

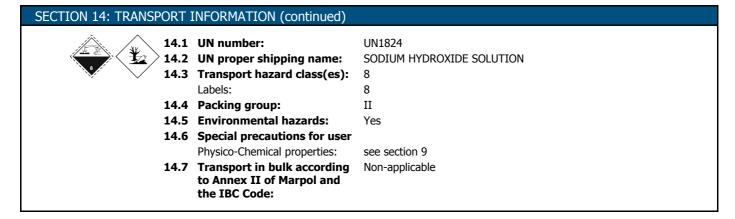
SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2017 and RID 2017:

| with regard to A | | | |
|--------------------------------------|--|--|--|
| | 14.1 | UN number: | UN1824 |
| | 14.2 | UN proper shipping name: | SODIUM HYDROXIDE SOLUTION |
| | [°] 14.3 | Transport hazard class(es): | 8 |
| | | Labels: | 8 |
| | 14.4 | Packing group: | II |
| | 14.5 | Environmental hazards: | Yes |
| | 14.6 | Special precautions for user | |
| | | Special regulations: | Non-applicable |
| | | Tunnel restriction code: | E |
| | | Physico-Chemical properties: | see section 9 |
| | | Limited quantities: | 1 L |
| | 14.7 | Transport in bulk according | Non-applicable |
| | | to Annex II of Marpol and the IBC Code: | |
| The second of de | | | |
| - | - | us goods by sea: | |
| With regard to IN | 1DG 38 | -16: | |
| | | | |
| | 14.1 | UN number: | UN1824 |
| | 14.2 | UN proper shipping name: | UN1824 SODIUM HYDROXIDE SOLUTION |
| | 14.2 | | |
| E E | 14.2 | UN proper shipping name: | SODIUM HYDROXIDE SOLUTION |
| | 14.2 14.3 | UN proper shipping name: Transport hazard class(es): | SODIUM HYDROXIDE SOLUTION 8 |
| | 14.2 14.3 14.4 | UN proper shipping name: Transport hazard class(es): Labels: | SODIUM HYDROXIDE SOLUTION 8 8 |
| | 14.2 14.3 14.4 14.5 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: | SODIUM HYDROXIDE SOLUTION 8 8 II |
| 8 ¥2 | 14.2 14.3 14.4 14.5 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user Special regulations: | SODIUM HYDROXIDE SOLUTION 8 8 II |
| | 14.2 14.3 14.4 14.5 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user | SODIUM HYDROXIDE SOLUTION 8 8 II Yes |
| | 14.2 14.3 14.4 14.5 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user Special regulations: | SODIUM HYDROXIDE SOLUTION 8 8 11 Yes Non-applicable |
| | 14.2 14.3 14.4 14.5 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities: | SODIUM HYDROXIDE SOLUTION 8 8 11 Yes Non-applicable F-A, S-B see section 9 1 L |
| | 14.2 14.3 14.4 14.5 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: | SODIUM HYDROXIDE SOLUTION 8 8 11 Yes Non-applicable F-A, S-B see section 9 |
| | 14.2 14.3 14.4 14.5 14.6 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities: Segregation group: Transport in bulk according to Annex II of Marpol and | SODIUM HYDROXIDE SOLUTION 8 8 11 Yes Non-applicable F-A, S-B see section 9 1 L |
| | 14.2 14.3 14.4 14.5 14.6 14.7 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities: Segregation group: Transport in bulk according to Annex II of Marpol and the IBC Code: | SODIUM HYDROXIDE SOLUTION 8 8 11 Yes Non-applicable F-A, S-B see section 9 1 L 18 |
| Transport of da With regard to IA | 14.2 14.3 14.4 14.5 14.6 14.7 | UN proper shipping name: Transport hazard class(es): Labels: Packing group: Environmental hazards: Special precautions for user Special regulations: EmS Codes: Physico-Chemical properties: Limited quantities: Segregation group: Transport in bulk according to Annex II of Marpol and the IBC Code: us goods by air: | SODIUM HYDROXIDE SOLUTION 8 8 11 Yes Non-applicable F-A, S-B see section 9 1 L 18 |





SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

| Section | Description | Lower-tier requirements | Upper-tier requirements |
|---------|-------------|----------------------------|----------------------------|
| E1 | | 100 | 200 |
| | | | |

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16): • Precautionary statements

Precautionary statements

Texts of the legislative phrases mentioned in section 2:

H290: May be corrosive to metals

H314: Causes severe skin burns and eye damage

H410: Very toxic to aquatic life with long lasting effects

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:



| SECTION 16: OTHER INFORMATION (continued) | |
|---|--|
| Acute Tox. 4: H302 - Harmful if swallowed Aquatic Acute 1: H400 - Very toxic to aquatic life Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects Eye Dam. 1: H318 - Causes serious eye damage Eye Irrit. 2: H319 - Causes serious eye irritation Met. Corr. 1: H290 - May be corrosive to metals Skin Corr. 1A: H314 - Causes severe skin burns and eye damage Skin Corr. 1B: H314 - Causes severe skin burns and eye damage Skin Irrit. 2: H315 - Causes skin irritation STOT SE 3: H335 - May cause respiratory irritation | |
| Advice related to training: Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product. Principal bibliographical sources: http://echa.europa.eu http://eur-lex.europa.eu | |
| Abbreviations and acronyms: | |
| ADR: European agreement concerning the international carriage of dangerous goods by road IMDG: International maritime dangerous goods code IATA: International Air Transport Association ICAO: International Civil Aviation Organisation COD: Chemical Oxygen Demand BOD5: 5-day biochemical oxygen demand BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50 LOg-POW: Octanol–water partition coefficient Koc: Partition coefficient of organic carbon | |

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.