## Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

| | | |
|---|---|---|
| Product name | : | Ansep BLC |
| Product code | : | 117564E |
| Use of the Substance/Mixture | : | Cleaning product |
| Substance type: | : | Mixture |
| | | **For professional users only.** |
| Product dilution information | : | 8.0 % |

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

| | | |
|---|---|---|
| Identified uses | : | Process cleaner. Cleaning In place (CIP) process<br>Process cleaner. Semi closed cleaning process |
| Recommended restrictions on use | : | Reserved for industrial and professional use. |

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

| | | |
|---|---|---|
| Company | : | Ecolab Ltd.<br>PO Box 11; Winnington Avenue<br>Northwich, Cheshire, United Kingdom CW8 4DX<br>+ 44 (0)1606 74488<br>ccs@ecolab.com |

### 1.4 Emergency telephone number

| | | |
|---|---|---|
| Emergency telephone number | : | +441618841235<br>+32-(0)3-575-5555 Trans-European |

Date of Compilation/Revision : 10.05.2021
Version : 1.1

## Section: 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

**Product AS SOLD**

| | |
|---|---|
| Corrosive to metals, Category 1 | H290 |
| Skin corrosion, Category 1 | H314 |
| Serious eye damage, Category 1 | H318 |
| Chronic aquatic toxicity, Category 3 | H412 |

The classification of this product is based only on its extreme pH value (in accordance with current

European legislation).

**Product AT USE DILUTION**

| | |
|---|---|
| Skin corrosion, Sub-category 1A | H314 |
| Serious eye damage, Category 1 | H318 |

The classification of this product is based only on its extreme pH value (in accordance with current European legislation).

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

**Product AS SOLD**

Hazard pictograms :

Signal Word : Danger

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. |

Supplemental Hazard Statements : EUH031 Contact with acids liberates toxic gas.

Precautionary Statements :

**Prevention:**

| | |
|---|---|
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |

**Response:**

| | |
|---|---|
| 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. |

Hazardous components which must be listed on the label:
sodium hydroxide
sodium hypochlorite

**Product AT USE DILUTION**

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H314 Causes severe skin burns and eye damage.

Precautionary Statements :

**Prevention:**

| | |
|---|---|
| P280 | Wear protective gloves/ eye protection/ face protection. |

**Response:**

| | |
|---|---|
| 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. |

**2.3 Other hazards**

**Product AS SOLD**
Mixing this product with acid or ammonia releases chlorine gas.

## Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.2 Mixtures**

**Product AS SOLD**
**Hazardous components**

| Chemical Name | CAS-No.<br>EC-No.<br>REACH No. | Classification<br>REGULATION (EC) No 1272/2008 | Concentration : [%] |
|---|---|---|---|
| sodium hydroxide | 1310-73-2<br>215-185-5<br>01-2119457892-27 | Skin corrosion Category 1A; H314<br>Corrosive to metals Category 1; H290<br><br>Skin corrosion Category 1A<br>H314 >= 5 %<br>Skin corrosion Category 1B<br>H314 2 - < 5 %<br>Skin irritation Category 2<br>H315 0.5 - < 2 %<br>Eye irritation Category 2<br>H319 0.5 - < 2 % | >= 5 - < 10 |
| sodium hypochlorite | 7681-52-9<br>231-668-3<br>01-2119488154-34 | Nota B Skin corrosion Sub-category 1B; H314<br>Serious eye damage Category 1; H318<br>Acute aquatic toxicity Category 1; H400<br>Chronic aquatic toxicity Category 1; H410<br>Corrosive to metals Category 1; H290<br><br>EUH031 >= 5 %<br>M = 10<br><br>M(Chronic) = 1 | >= 1 - < 2.5 |
| potassium permanganate | 7722-64-7<br>231-760-3<br>01-2119480139-34 | Oxidizing solids Category 2; H272<br>Acute toxicity Category 4; H302<br>Reproductive toxicity Category 2; H361d<br>Acute aquatic toxicity Category 1; H400<br>Chronic aquatic toxicity Category 1; H410<br>Serious eye damage/eye irritation Category 1; H318<br>Skin corrosion/irritation Category 1; H314<br><br>M = 10<br>M(Chronic) = 10 | < 0.1 |

**Product AT USE DILUTION**
**Hazardous components**

| Chemical Name | CAS-No. | Classification | Concentration |
|---|---|---|---|

| | EC-No.<br>REACH No. | REGULATION (EC) No 1272/2008 | : [%] |
|---|---|---|---|
| sodium hydroxide | 1310-73-2<br>215-185-5<br>01-2119457892-27 | Skin corrosionCategory 1A; H314<br>Corrosive to metalsCategory 1; H290<br><br>Skin corrosion Category 1A<br>H314 >= 5 %<br>Skin corrosion Category 1B<br>H314 2 - < 5 %<br>Skin irritation Category 2<br>H315 0.5 - < 2 %<br>Eye irritation Category 2<br>H319 0.5 - < 2 % | >= 0.5 - < 1 |
| sodium hypochlorite | 7681-52-9<br>231-668-3<br>01-2119488154-34 | Skin corrosionSub-category 1B; H314<br>Serious eye damageCategory 1; H318<br>Acute aquatic toxicityCategory 1; H400<br>Chronic aquatic toxicityCategory 1; H410<br>Corrosive to metalsCategory 1; H290<br><br>EUH031 >= 5 %<br>M = 10<br><br>M(Chronic) = 1 | < 0.1 |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## Section: 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**Product AS SOLD**

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, give 2 glasses of water. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

**Product AT USE DILUTION**

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, give 2 glasses of water. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention

if symptoms occur.

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

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Indication of immediate medical attention and special treatment needed**

Treatment : Treat symptomatically.

## Section: 5. FIREFIGHTING MEASURES

**Product AS SOLD**

**5.1 Extinguishing media**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

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

Specific hazards during firefighting : Exposure to decomposition products may be a hazard to health.

Hazardous combustion products : Depending on combustion properties, decomposition products may include following materials:
Not applicable.

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Use personal protective equipment.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

## Section: 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

**Product AS SOLD**

Advice for non-emergency personnel : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

**Product AT USE DILUTION**

| | | |
|---|---|---|
| Advice for non-emergency personnel | : | Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8. |
| Advice for emergency responders | : | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. |

### 6.2 Environmental precautions

**Product AS SOLD**

| | | |
|---|---|---|
| Environmental precautions | : | Do not allow contact with soil, surface or ground water. |

**Product AT USE DILUTION**

| | | |
|---|---|---|
| Environmental precautions | : | Do not allow contact with soil, surface or ground water. |

### 6.3 Methods and materials for containment and cleaning up

**Product AS SOLD**

| | | |
|---|---|---|
| Methods for cleaning up | : | Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. |

**Product AT USE DILUTION**

| | | |
|---|---|---|
| Methods for cleaning up | : | Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. |

### 6.4 Reference to other sections

See Section 1 for emergency contact information.
For personal protection see section 8.
See Section 13 for additional waste treatment information.

## Section: 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

**Product AS SOLD**

| | | |
|---|---|---|
| Advice on safe handling | : | Do not ingest. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not breathe spray, vapour. Mixing this product with acid or ammonia releases chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE). |
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. |

Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

**Product AT USE DILUTION**

| | | |
|---|---|---|
| Advice on safe handling | : | Do not ingest. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not breathe spray, vapour. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE). |
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard. |

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

**Product AS SOLD**

| | | |
|---|---|---|
| Requirements for storage areas and containers | : | Do not store near acids. Absorb spillage to prevent material damage. Keep out of reach of children. Keep container tightly closed. Keep only in original packaging. Store in suitable labeled containers. |
| Storage temperature | : | 5 °C to 35 °C |
| Packaging material | : | Suitable material: Plastic material<br><br>Unsuitable material: Mild steel, Aluminium |

**Product AT USE DILUTION**

| | | |
|---|---|---|
| Requirements for storage areas and containers | : | Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers. |

### 7.3 Specific end uses

**Product AS SOLD**

## Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Product AS SOLD**

**Occupational Exposure Limits**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|---|---|---|---|---|
| sodium hydroxide | 1310-73-2 | STEL | 2 mg/m3 | UKCOSSTD |
| potassium permanganate | 7722-64-7 | TWA (Inhalable) | 0.2 mg/m3 (Manganese) | UKCOSSTD |
| | | TWA (Respirable fraction) | 0.05 mg/m3 (Manganese) | UKCOSSTD |
| chlorine | 7782-50-5 | STEL | 0.5 ppm<br>1.5 mg/m3 | UKCOSSTD |

DNEL

| | | |
|---|---|---|
| sodium hydroxide | : | End Use: Workers<br>Exposure routes: Inhalation<br>Potential health effects: Long-term local effects |

| | | |
|---|---|---|
| | | Value: 1 mg/m3<br><br>End Use: Consumers<br>Exposure routes: Inhalation<br>Potential health effects: Long-term local effects<br>Value: 1 mg/m3 |

**8.2 Exposure controls**

**Product AS SOLD**
**Appropriate engineering controls**

| | | |
|---|---|---|
| Engineering measures | : | Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards. |

**Individual protection measures**

| | | |
|---|---|---|
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard. |
| Eye/face protection (EN 166) | : | Safety goggles<br>Face-shield |
| Hand protection (EN 374) | : | Recommended preventive skin protection<br>Gloves<br>Nitrile rubber<br>butyl-rubber<br>Breakthrough time: 1 – 4 hours<br>Minimum thickness for butyl-rubber 0.7 mm for nitrile rubber 0.4 mm or equivalent (please refer to the gloves manufacturer/distributor for advise).<br>Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. |
| Skin and body protection (EN 14605) | : | Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing including appropriate safety shoes |
| Respiratory protection (EN 143, 14387) | : | None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization. |

**Product AT USE DILUTION**
**Appropriate engineering controls**

| | | |
|---|---|---|
| Engineering measures | : | Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards. |

**Individual protection measures**

| | | |
|---|---|---|
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard. |
| Eye/face protection (EN 166) | : | Safety goggles<br>Face-shield |
| Hand protection (EN 374) | : | Recommended preventive skin protection<br>Gloves<br>Nitrile rubber<br>butyl-rubber<br>Breakthrough time: 1 – 4 hours<br>Minimum thickness for butyl-rubber 0.7 mm for nitrile rubber 0.4 mm or equivalent (please refer to the gloves manufacturer/distributor for advise).<br>Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. |
| Skin and body protection (EN 14605) | : | Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing including appropriate safety shoes |
| Respiratory protection (EN 143, 14387) | : | None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization. |

**Environmental exposure controls**

| | | |
|---|---|---|
| General advice | : | Consider the provision of containment around storage vessels. |

## Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | **Product AS SOLD** | **Product AT USE DILUTION** |
|---|---|---|---|
| Appearance | : | liquid | liquid |
| Colour | : | clear, purple | light pink |
| Odour | : | Chlorine | not significant |
| pH | : | 13.0 - 13.6, 100 % | 13.0 |
| Flash point | : | Not applicable. | |
| Odour Threshold | : | Not applicable and/or not determined for the mixture | |
| Melting point/freezing point | : | Not applicable and/or not determined for the mixture | |
| Initial boiling point and boiling range | : | > 100 °C | |
| Evaporation rate | : | Not applicable and/or not determined for the mixture | |
| Flammability (solid, gas) | : | Not applicable and/or not determined for the mixture | |

| | | |
|---|---|---|
| Upper explosion limit | : | Not applicable and/or not determined for the mixture |
| Lower explosion limit | : | Not applicable and/or not determined for the mixture |
| Vapour pressure | : | Not applicable and/or not determined for the mixture |
| Relative vapour density | : | Not applicable and/or not determined for the mixture |
| Relative density | : | 1.1 - 1.16 |
| Water solubility | : | soluble |
| Solubility in other solvents | : | Not applicable and/or not determined for the mixture |
| Partition coefficient: n-octanol/water | : | Not applicable and/or not determined for the mixture |
| Auto-ignition temperature | : | Not applicable and/or not determined for the mixture |
| Thermal decomposition | : | Not applicable and/or not determined for the mixture |
| Viscosity, kinematic | : | Not applicable and/or not determined for the mixture |
| Explosive properties | : | Not applicable and/or not determined for the mixture |
| Oxidizing properties | : | Yes |

### 9.2 Other information

Not applicable and/or not determined for the mixture

## Section: 10. STABILITY AND REACTIVITY

**Product AS SOLD**

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Mixing this product with acid or ammonia releases chlorine gas.

### 10.4 Conditions to avoid

None known.

### 10.5 Incompatible materials

Acids
Metals
Organic materials

Mild steel
Aluminium

### 10.6 Hazardous decomposition products

Depending on combustion properties, decomposition products may include following materials:
Not applicable.

## Section: 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Product AS SOLD**

| | | |
|---|---|---|
| Information on likely routes of exposure | : | Inhalation, Eye contact, Skin contact |

**Product**

| | | |
|---|---|---|
| Acute oral toxicity | : | There is no data available for this product. |
| Acute inhalation toxicity | : | There is no data available for this product. |
| Acute dermal toxicity | : | There is no data available for this product. |
| Skin corrosion/irritation | : | There is no data available for this product. |
| Serious eye damage/eye irritation | : | There is no data available for this product. |
| Respiratory or skin sensitization | : | There is no data available for this product. |
| Carcinogenicity | : | There is no data available for this product. |
| Reproductive effects | : | There is no data available for this product. |
| Germ cell mutagenicity | : | There is no data available for this product. |
| Teratogenicity | : | There is no data available for this product. |
| STOT - single exposure | : | There is no data available for this product. |
| STOT - repeated exposure | : | There is no data available for this product. |
| Aspiration toxicity | : | There is no data available for this product. |

**Components**

| | | |
|---|---|---|
| Acute oral toxicity | : | sodium hypochlorite LD50 rat: 5,230 mg/kg<br>potassium permanganate LD50 rat: 1,125 mg/kg |

**Components**

| | | |
|---|---|---|
| Acute dermal toxicity | : | sodium hypochlorite LD50 rabbit: > 10,000 mg/kg |

**Potential Health Effects**

**Product AS SOLD**

| | | |
|---|---|---|
| Eyes | : | Causes serious eye damage. |
| Skin | : | Causes severe skin burns. |
| Ingestion | : | Causes digestive tract burns. |
| Inhalation | : | May cause nose, throat, and lung irritation. |

| | | |
|---|---|---|
| Chronic Exposure | : | Health injuries are not known or expected under normal use. |

**Product AT USE DILUTION**

| | | |
|---|---|---|
| Eyes | : | Causes serious eye damage. |
| Skin | : | Causes severe skin burns. |
| Ingestion | : | Causes digestive tract burns. |
| Inhalation | : | May cause nose, throat, and lung irritation. |
| Chronic Exposure | : | Health injuries are not known or expected under normal use. |

**Experience with human exposure**

**Product AS SOLD**

| | | |
|---|---|---|
| Eye contact | : | Redness, Pain, Corrosion |
| Skin contact | : | Redness, Pain, Corrosion |
| Ingestion | : | Corrosion, Abdominal pain |
| Inhalation | : | Respiratory irritation, Cough |

**Product AT USE DILUTION**

| | | |
|---|---|---|
| Eye contact | : | Redness, Pain, Corrosion |
| Skin contact | : | Redness, Pain, Corrosion |
| Ingestion | : | Corrosion, Abdominal pain |
| Inhalation | : | Respiratory irritation, Cough |

## Section: 12. ECOLOGICAL INFORMATION

**Product AS SOLD**

**12.1 Toxicity**

| | | |
|---|---|---|
| Environmental Effects | : | Harmful to aquatic life with long lasting effects. |

**Product**

| | | |
|---|---|---|
| Toxicity to fish | : | no data available |
| Toxicity to daphnia and other aquatic invertebrates | : | no data available |
| Toxicity to algae | : | no data available |

**Components**

| | | |
|---|---|---|
| Toxicity to fish | : | sodium hypochlorite96 h EC50: 0.14 mg/l<br><br>potassium permanganate96 h LC50 Poecilia reticulata (guppy): 0.47 mg/l |

**Components**

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | sodium hydroxide48 h EC50: 40 mg/l |

sodium hypochlorite48 h EC50: 0.071 mg/l

potassium permanganate48 h EC50 Daphnia magna (Water flea): 0.06 mg/l

**Components**

Toxicity to algae : potassium permanganate72 h EC50 algae: 0.43 mg/l

### 12.2 Persistence and degradability

**Product**

Biodegradability : The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC

**Components**

Biodegradability : sodium hydroxideResult: Not applicable - inorganic

sodium hypochloriteResult: Not applicable - inorganic

potassium permanganateResult: Not applicable - inorganic

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

**Product**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

no data available

## Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste.Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

### 13.1 Waste treatment methods

**Product AS SOLD**

Product : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

| | | |
|---|---|---|
| Contaminated packaging | : | Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations. |
| Guidance for Waste Code selection | : | Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local regulations. |

**Product AT USE DILUTION**

| | | |
|---|---|---|
| Product | : | The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. |
| Contaminated packaging | : | Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations. |

## Section: 14. TRANSPORT INFORMATION

**Product AS SOLD**

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

**Land transport (ADR/ADN/RID)**

| | | |
|---|---|---|
| 14.1 UN number | : | 3266 |
| 14.2 UN proper shipping name | : | CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.<br><br>(sodium hypochlorite, sodium hydroxide) |
| 14.3 Transport hazard class(es) | : | 8 |
| 14.4 Packing group | : | II |
| 14.5 Environmental hazards | : | No |
| 14.6 Special precautions for user | : | None |

**Air transport (IATA)**

| | | |
|---|---|---|
| 14.1 UN number | : | 3266 |
| 14.2 UN proper shipping name | : | Corrosive liquid, basic, inorganic, n.o.s.<br><br>(sodium hypochlorite, sodium hydroxide) |
| 14.3 Transport hazard class(es) | : | 8 |
| 14.4 Packing group | : | II |
| 14.5 Environmental hazards | : | No |
| 14.6 Special precautions for user | : | None |

**Sea transport (IMDG/IMO)**

| | | |
|---|---|---|
| 14.1 UN number | : | 3266 |
| 14.2 UN proper shipping name | : | CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.<br>(sodium hypochlorite, sodium hydroxide) |
| 14.3 Transport hazard class(es) | : | 8 |
| 14.4 Packing group | : | II |
| 14.5 Environmental hazards | : | No |
| 14.6 Special precautions for user | : | None |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | : | Not applicable. |

## Section: 15. REGULATORY INFORMATION

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

| | | |
|---|---|---|
| according to Detergents Regulation EC 648/2004 | : | less than 5 %: Phosphates, Chlorine-based bleaching agents |
| Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. | : | Not applicable. |

**National Regulations**

**Take note of Dir 94/33/EC on the protection of young people at work.**

| | | |
|---|---|---|
| Other regulations | : | The Chemicals (Hazard Information and Packaging for Supply) Regulations.<br>The Control of Substances Hazardous to Health Regulations.<br>Health and Safety at Work Act. |

**15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out on the product.

## Section: 16. OTHER INFORMATION

**Procedure used to derive the classification according to REGULATION (EC) No 1272/2008**

| Classification | Justification |
|---|---|
| Corrosive to metals 1, H290 | Calculation method |
| Skin corrosion 1, H314 | Based on product data or assessment |
| Serious eye damage 1, H318 | Based on product data or assessment |
| Chronic aquatic toxicity 3, H412 | Calculation method |

**Full text of H-Statements**

| | |
|---|---|
| H272 | May intensify fire; oxidiser. |
| H290 | May be corrosive to metals. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H361d | Suspected of damaging the unborn child. |

| | |
|---|---|
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**Full text of other abbreviations**

ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS – Australian Inventory of Chemical Substances; ASTM – American Society for the Testing of Materials; bw – Body weight; CLP – Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR – Carcinogen, Mutagen or Reproductive Toxicant; DIN – Standard of the German Institute for Standardisation; DSL – Domestic Substances List (Canada); ECHA – European Chemicals Agency; EC-Number – European Community number; ECx – Concentration associated with x% response; ELx – Loading rate associated with x% response; EmS – Emergency Schedule; ENCS – Existing and New Chemical Substances (Japan); ErCx – Concentration associated with x% growth rate response; GHS – Globally Harmonized System; GLP – Good Laboratory Practice; IARC – International Agency for Research on Cancer; IATA – International Air Transport Association; IBC – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 – Half maximal inhibitory concentration; ICAO – International Civil Aviation Organization; IECSC – Inventory of Existing Chemical Substances in China; IMDG – International Maritime Dangerous Goods; IMO – International Maritime Organization; ISHL – Industrial Safety and Health Law (Japan); ISO – International Organisation for Standardization; KECI – Korea Existing Chemicals Inventory; LC50 – Lethal Concentration to 50 % of a test population; LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL – International Convention for the Prevention of Pollution from Ships; n.o.s. – Not Otherwise Specified; NO(A)EC – No Observed (Adverse) Effect Concentration; NO(A)EL – No Observed (Adverse) Effect Level; NOELR – No Observable Effect Loading Rate; NZIoC – New Zealand Inventory of Chemicals; OECD – Organization for Economic Co-operation and Development; OPPTS – Office of Chemical Safety and Pollution Prevention; PBT – Persistent, Bioaccumulative and Toxic substance; PICCS – Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR – (Quantitative) Structure Activity Relationship; REACH – Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID – Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT – Self-Accelerating Decomposition Temperature; SDS – Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA – Toxic Substances Control Act (United States); UN – United Nations; vPvB – Very Persistent and Very Bioaccumulative

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Annex: Exposure Scenarios**

**Exposure Scenario: Process cleaner. Cleaning In place (CIP) process**

| | | | |
|---|---|---|---|
| Life Cycle Stage | : | Use at industrial sites | |
| Product category | : | **PC35** | Washing and cleaning products (including solvent based products) |

**Contributing scenario controlling environmental exposure for:**

| | | | |
|---|---|---|---|
| Environmental release category | : | **ERC4** | Industrial use of processing aids in processes and products, not becoming part of articles |
| Daily amount per site | : | 50 kg | |
| Type of Sewage Treatment Plant | : | Municipal sewage treatment plant | |

**Contributing scenario controlling worker exposure for:**

| | | | |
|---|---|---|---|
| Process category | : | **PROC8b** | Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities |
| Exposure duration | : | 60 min | |
| Operational conditions and risk management measures | : | Indoor | |
| | | Local Exhaust Ventilation is not required | |
| General ventilation | | Ventilation rate per hour | 1 |
| Skin Protection | : | see section 8 | |
| Respiratory Protection | : | see section 8 | |

**Contributing scenario controlling worker exposure for:**

| | | | |
|---|---|---|---|
| Process category | : | **PROC1** | Use in closed process, no likelihood of exposure |
| Exposure duration | : | 480 min | |
| Operational conditions and risk management measures | : | Indoor | |
| | | Local Exhaust Ventilation is not required | |
| General ventilation | | Ventilation rate per hour | 1 |
| Skin Protection | : | see section 8 | |
| Respiratory Protection | : | see section 8 | |

**Exposure Scenario: Process cleaner. Semi closed cleaning process**

| | | | |
|---|---|---|---|
| Life Cycle Stage | : | Use at industrial sites | |
| Product category | : | **PC35** | Washing and cleaning products (including solvent based products) |

**Contributing scenario controlling environmental exposure for:**

| | | | |
|---|---|---|---|
| Environmental release category | : | **ERC4** | Industrial use of processing aids in processes and products, not becoming part of articles |
| Daily amount per site | : | 50 kg | |
| Type of Sewage Treatment Plant | : | Municipal sewage treatment plant | |

**Contributing scenario controlling worker exposure for:**

| | | | |
|---|---|---|---|
| Process category | : | **PROC8b** | Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities |
| Exposure duration | : | 60 min | |
| Operational conditions and risk management measures | : | Indoor | |
| | | Local Exhaust Ventilation is not required | |
| General ventilation | | Ventilation rate per hour | 1 |
| Skin Protection | : | see section 8 | |
| Respiratory Protection | : | see section 8 | |

**Contributing scenario controlling worker exposure for:**

| | | | |
|---|---|---|---|
| Process category | : | **PROC4** | Use in batch and other process (synthesis) where opportunity for exposure arises |
| Exposure duration | : | 480 min | |
| Operational conditions and risk management measures | : | Indoor | |
| | | Local Exhaust Ventilation is not required | |
| General ventilation | | Ventilation rate per hour | 1 |
| Skin Protection | : | see section 8 | |
| Respiratory Protection | : | see section 8 | |