# Safety Data Sheet

*According to Regulation (EC) No 1907/2006*

## Suma Nova L6

**Revision:** 2019-05-19 **Version:** 01.0

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

**1.1 Product identifier**
**Trade name:** Suma Nova L6

**1.2 Relevant identified uses of the substance or mixture and uses advised against**
**Identified uses:**
For professional and industrial use only.
AISE-P202 - Dishwash product. Automatic process
AISE-P801 - Food process cleaner. Cleaning In place (CIP) process
**Uses advised against:** Uses other than those identified are not recommended

**1.3 Details of the supplier of the safety data sheet**
Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

**Contact details**
Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@diversey.com

**1.4 Emergency telephone number**
Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

## SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture**
Skin Corr. 1A (H314)
Met. Corr. 1 (H290)

**2.2 Label elements**



**Signal word:** Danger.

Contains sodium hydroxide (Sodium Hydroxide).

**Hazard statements:**
H314 - Causes severe skin burns and eye damage.
H290 - May be corrosive to metals.

**Precautionary statements:**
P280 - Wear protective gloves, protective clothing and eye or face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTRE, doctor or physician.

**2.3 Other hazards**
No other hazards known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures**

| Ingredient(s) | EC number | CAS # | REACH number | Classification | Notes | Weight percent |
|---|---|---|---|---|---|---|
| sodium hydroxide | 215-185-5 | 1310-73-2 | 01-2119457892-27 | Skin Corr. 1A (H314)<br>Met. Corr. 1 (H290) | | 10-20 |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | 223-267-7 | 3794-83-0 | [1] | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319) | | 1-3 |

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

**General Information:** If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. Provide fresh air. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

**Inhalation:** Get medical attention or advice if you feel unwell.

**Skin contact:** Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off immediately all contaminated clothing and wash it before re-use. Immediately call a POISON CENTRE, doctor or physician.

**Eye contact:** Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

**Ingestion:** Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

**Self-protection of first aider:** Consider personal protective equipment as indicated in subsection 8.2.

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

**Inhalation:** No known effects or symptoms in normal use.

**Skin contact:** Causes severe burns.

**Eye contact:** Causes severe or permanent damage.

**Ingestion:** Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

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

No special hazards known.

**5.3 Advice for firefighters**

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

## SECTION 6: Accidental release measures

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

Wear suitable protective clothing, gloves and eye/face protection.

**6.2 Environmental precautions**

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

**6.3 Methods and material for containment and cleaning up**

Use neutralising agent. Absorb onto dry sand or similar inert material.

**6.4 Reference to other sections**

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**

**Measures to prevent fire and explosions:**

No special precautions required.

**Measures required to protect the environment:**

For environmental exposure controls see subsection 8.2.

**Advices on general occupational hygiene:**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation.

**7.2 Conditions for safe storage, including any incompatibilities**
Store in accordance with local and national regulations. Keep only in original packaging. Store in a closed container.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

**7.3 Specific end use(s)**
No specific advice for end use available.

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**
**Workplace exposure limits**

Air limit values, if available:

| Ingredient(s) | UK - Long term value(s) | UK - Short term value(s) |
|---|---|---|
| sodium hydroxide | | 2 mg/m³ |

Biological limit values, if available:

**Recommended monitoring procedures, if available:**

Additional exposure limits under the conditions of use, if available:

**DNEL/DMEL and PNEC values**
**Human exposure**
DNEL oral exposure - Consumer (mg/kg bw)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|---|---|---|---|
| sodium hydroxide | - | - | - | - |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | No data available | No data available | 2.1 |

DNEL dermal exposure - Worker

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---|---|---|---|---|
| sodium hydroxide | 2 % | - | - | - |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | No data available | No data available | 48 |

DNEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---|---|---|---|---|
| sodium hydroxide | 2 % | - | - | - |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | No data available | No data available | 24 |

DNEL inhalatory exposure - Worker (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|---|---|---|---|
| sodium hydroxide | - | - | 1 | - |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | No data available | No data available | 16.9 |

DNEL inhalatory exposure - Consumer (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|---|---|---|---|
| sodium hydroxide | - | - | 1 | - |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | 10 | No data available | 10 | 4.2 |

**Environmental exposure**
Environmental exposure - PNEC

| Ingredient(s) | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|---|---|---|---|---|
| sodium hydroxide | - | - | - | - |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | No data available | No data available | No data available |

Environmental exposure - PNEC, continued

| Ingredient(s) | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m³) |
|---|---|---|---|---|
| sodium hydroxide | - | - | - | - |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | No data available | No data available | No data available |

**8.2 Exposure controls**

*The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.*
*If available, please refer to the product information sheet for application and handling instructions.*
*Normal use conditions are assumed for this section.*

*Recommended safety measures for handling the undiluted product:*
*Covering activities such as filling and transfer of product to application equipment, flasks or buckets*

**Appropriate engineering controls:** If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.
**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

**Personal protective equipment**
**Eye / face protection:** Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.
**Hand protection:** Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.
**Body protection:** Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
**Respiratory protection:** No special requirements under normal use conditions.

**Environmental exposure controls:** Should not reach sewage water or drainage ditch undiluted or unneutralised.

*Recommended safety measures for handling the diluted product:*

**Recommended maximum concentration (%):** 0.4

**Appropriate engineering controls:** No special requirements under normal use conditions.
**Appropriate organisational controls:** No special requirements under normal use conditions.

**Personal protective equipment**
**Eye / face protection:** No special requirements under normal use conditions.
**Hand protection:** No special requirements under normal use conditions.
**Body protection:** No special requirements under normal use conditions.
**Respiratory protection:** No special requirements under normal use conditions.

**Environmental exposure controls:** No special requirements under normal use conditions.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**
**Information in this section refers to the product, unless it is specifically stated that substance data is listed**

| | Method / remark |
|---|---|
| **Physical State:** Liquid | |
| **Colour:** Clear, Yellow | |
| **Odour:** Product specific | |
| **Odour threshold:** Not applicable | |
| **pH:** > 12 (neat) | ISO 4316 |
| **Dilution pH:** ≈ 12 (1%) | ISO 4316 |
| **Melting point/freezing point (°C):** Not determined | Not relevant to classification of this product |
| **Initial boiling point and boiling range (°C):** Not determined | |

Substance data, boiling point

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|---|---|---|---|
| sodium hydroxide | > 990 | Method not given | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | |

| | Method / remark |
|---|---|
| **Flammability (liquid):** Not flammable. | |
| **Flash point (°C):** Not applicable. | Not relevant to classification of this product |
| **Sustained combustion:** Not applicable. | |
| *( UN Manual of Tests and Criteria, section 32, L.2 )* | |

**Evaporation rate:** Not determined
**Flammability (solid, gas):** Not applicable to liquids
**Upper/lower flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

**Method / remark**

**Vapour pressure:** Not determined

Substance data, vapour pressure

| Ingredient(s) | Value (Pa) | Method | Temperature (°C) |
|---|---|---|---|
| sodium hydroxide | < 1330 | Method not given | 20 |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | |

**Method / remark**

**Vapour density:** Not determined
**Relative density:** ≈ 1.23 (20 °C) OECD 109 (EU A.3)
**Solubility in / Miscibility with Water:** Fully miscible

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|---|---|---|---|
| sodium hydroxide | 1000 | Method not given | 20 |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | |

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

**Method / remark**

**Autoignition temperature:** Not determined
**Decomposition temperature:** Not applicable.
**Viscosity:** Not determined Not relevant to classification of this product
**Explosive properties:** Not explosive.
**Oxidising properties:** Not oxidising.

**9.2 Other information**
**Surface tension (N/m):** Not determined Not relevant to classification of this product
**Corrosion to metals:** Corrosive Weight of evidence

Substance data, dissociation constant, if available:

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
No reactivity hazards known under normal storage and use conditions.

**10.2 Chemical stability**
Stable under normal storage and use conditions.

**10.3 Possibility of hazardous reactions**
No hazardous reactions known under normal storage and use conditions.

**10.4 Conditions to avoid**
None known under normal storage and use conditions.

**10.5 Incompatible materials**
Reacts with acids.

**10.6 Hazardous decomposition products**
None known under normal storage and use conditions.

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

Mixture data:.

**Relevant calculated ATE(s):**
ATE - Oral (mg/kg): >5000

Substance data, where relevant and available, are listed below:.

### Acute toxicity

Acute oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| sodium hydroxide | $LD_{50}$ | 1350 | Rabbit | Method not given | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | |

### Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---|---|---|---|
| sodium hydroxide | Corrosive | Rabbit | Method not given | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---|---|---|---|
| sodium hydroxide | Corrosive | Rabbit | Method not given | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---|---|---|---|
| sodium hydroxide | No data available | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | | |

### Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|---|---|---|---|---|
| sodium hydroxide | Not sensitising | | Human repeated patch test | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---|---|---|---|
| sodium hydroxide | No data available | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | | |

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

| Ingredient(s) | Result (in-vitro) | Method (in-vitro) | Result (in-vivo) | Method (in-vivo) |
|---|---|---|---|---|
| sodium hydroxide | No evidence for mutagenicity, negative test results | DNA repair test on rat hepatocytes OECD 473 | No evidence for mutagenicity, negative test results | OECD 474 (EU B.12) OECD 475 (EU B.11) |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | No data available | |

Carcinogenicity

| Ingredient(s) | Effect |
|---|---|
| sodium hydroxide | No evidence for carcinogenicity, weight-of-evidence |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|---|---|---|---|---|---|---|---|
| sodium hydroxide | | | No data available | | | | No evidence for developmental toxicity No evidence for reproductive toxicity |
| tetrasodium (1-hydroxy | | | No data | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ethylidene)bisphosphonate | | | available | | | | |

**Repeated dose toxicity**

Sub-acute or sub-chronic oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | | |

Sub-chronic dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | | |

Sub-chronic inhalation toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | | |

Chronic toxicity

| Ingredient(s) | Exposure route | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time | Specific effects and organs affected | Remark |
|---|---|---|---|---|---|---|---|---|
| sodium hydroxide | | | No data available | | | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | | No data available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|---|---|
| sodium hydroxide | No data available |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|---|---|
| sodium hydroxide | No data available |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available |

**Aspiration hazard**

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

**Potential adverse health effects and symptoms**

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

## SECTION 12: Ecological information

### 12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

**Aquatic short-term toxicity**

Aquatic short-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| sodium hydroxide | $LC_{50}$ | 35 | *Various species* | Method not given | 96 |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| sodium hydroxide | $EC_{50}$ | 40.4 | *Ceriodaphnia sp.* | Method not given | 48 |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data | | | |

| | | | | | |
|---|---|---|---|---|---|
| | | available | | | |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---|---|---|---|---|
| sodium hydroxide | $EC_{50}$ | 22 | *Photobacterium phosphoreum* | Method not given | 0.25 |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | - |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | |

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | | |

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw sediment) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | - | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | | No data available | | | | |

**Terrestrial toxicity**

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | - | |

Terrestrial toxicity - plants, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | - | |

Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | - | |

Terrestrial toxicity - beneficial insects, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | - | |

Terrestrial toxicity - soil bacteria, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|---|---|---|---|---|---|
| sodium hydroxide | | No data available | | | - | |

### 12.2 Persistence and degradability

**Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

| Ingredient(s) | Half-life time | Method | Evaluation | Remark |
|---|---|---|---|---|
| sodium hydroxide | 13 second(s) | Method not given | Rapidly photodegradable | |

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | $DT_{50}$ | Method | Evaluation |
|---|---|---|---|---|---|
| sodium hydroxide | | | | | Not applicable (inorganic substance) |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | Activated sludge, aerobe | | | Read across | Not readily biodegradable. |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

### 12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|---|---|---|---|---|
| sodium hydroxide | No data available | | Not relevant, does not bioaccumulate | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|---|---|---|---|---|
| sodium hydroxide | No data available | | | | |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | | | |

### 12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

| Ingredient(s) | Adsorption coefficient Log Koc | Desorption coefficient Log Koc(des) | Method | Soil/sediment type | Evaluation |
|---|---|---|---|---|---|
| sodium hydroxide | No data available | | | | Mobile in soil |
| tetrasodium (1-hydroxy ethylidene)bisphosphonate | No data available | | | | |

### 12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

### 12.6 Other adverse effects

No other adverse effects known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Waste from residues / unused products:** The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

**European Waste Catalogue:** 20 01 15* - alkalines.

**Empty packaging**

**Recommendation:** Dispose of observing national or local regulations.

**Suitable cleaning agents:** Water, if necessary with cleaning agent.

## SECTION 14: Transport information




**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

**14.1 UN number:** 1824

**14.2 UN proper shipping name:**
Sodium hydroxide solution

**14.3 Transport hazard class(es):**
**Transport hazard class (and subsidiary risks):** 8

**14.4 Packing group:** II

**14.5 Environmental hazards:**
**Environmentally hazardous:** No
**Marine pollutant:** No

**14.6 Special precautions for user:** None known.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** The product is not transported in bulk tankers.

**Other relevant information:**

**ADR**
**Classification code:** C5
**Tunnel restriction code:** E
**Hazard identification number:** 80

**IMO/IMDG**
**EmS:** F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

## SECTION 15: Regulatory information

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

**EU regulations:**
• Regulation (EC) No. 1907/2006 - REACH
• Regulation (EC) No 1272/2008 - CLP
• Regulation (EC) No. 648/2004 - Detergents regulation

**Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII):** Not applicable.

UFI: YTA3-Q01Y-W007-E3YS

**Ingredients according to EC Detergents Regulation 648/2004**

| | |
|---|---|
| polycarboxylates | 5 - 15 % |
| phosphonates | < 5 % |

**15.2 Chemical safety assessment**
A chemical safety assessment has not been carried out on the mixture

## SECTION 16: Other information

*The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract*

**SDS code:** MS1003607 **Version:** 01.0 **Revision:** 2019-05-19

**Classification procedure**
The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

• H290 - May be corrosive to metals.
• H302 - Harmful if swallowed.
• H314 - Causes severe skin burns and eye damage.
• H315 - Causes skin irritation.
• H319 - Causes serious eye irritation.

**Abbreviations and acronyms:**
• AISE - The international Association for Soaps, Detergents and Maintenance Products
• DNEL - Derived No Effect Limit
• EUH - CLP Specific hazard statement
• PBT - Persistent, Bioaccumulative and Toxic
• PNEC - Predicted No Effect Concentration

• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative
• ATE - Acute Toxicity Estimate

**End of Safety Data Sheet**