

## Divos 130 VM12

Revision: 2012-12-06

Version 07

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

#### 1.1 Product identifier

Trade name: Divos 130 VM12

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

##### Identified uses:

For industrial use only.

AISE-P801 - Food process cleaner. Cleaning In place (CIP) process

AISE-P802 - Food process cleaner. Semi-closed cleaning process

**Uses advised against** Uses other than those identified are not recommended

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

Diversey local operating company

#### Contact details

Diversey local operating company

#### 1.4 Emergency telephone number

Diversey local operating company

*This International SDS is for information only. It does not meet all applicable regulatory requirements and does not replace the relevant statutory data sheet for your country*

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

The product has been classified and labelled in accordance with Directive 1999/45/EC and corresponding national legislation.

##### Indication of danger

C - Corrosive

##### Risk phrases:

R35 - Causes severe burns.

R20/22 - Harmful by inhalation and if swallowed.

#### 2.2 Label elements



C - Corrosive

Contains tetrasodium ethylene diamine tetraacetate, sodium hydroxide

##### Risk phrases:

R35 - Causes severe burns.

R20/22 - Harmful by inhalation and if swallowed.

##### Safety phrases:

S22 - Do not breathe dust.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28a - After contact with skin, wash immediately with plenty of water.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

#### 2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

| Ingredient(s)                             | EC number | CAS number | REACH number      | Classification | Classification (EC) 1272/2008                                    | Notes | Weight percent |
|---|-----------|------------|-------------------|----------------|--|-------|----------------|
| sodium hydroxide                          | 215-185-5 | 1310-73-2  | 01-2119457892-27  | C; R35         | Skin Corr. 1A (H314)   |       | 30-50          |
| tetrasodium ethylene diamine tetraacetate | 200-573-9 | 64-02-8    | 01-2119486762-27  | Xn; R20/22-41  | Eye Dam. 1 (H318)<br>Acute Tox. 4 (H302)<br>Acute Tox. 4 (H332)  |       | 30-50          |
| sodium alkylbenzenesulphonate             | 290-656-6 | 90194-45-9 | No data available | Xn; R22-38-41  | Eye Dam. 1 (H318)<br>Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315) |       | 3-10           |

\* Polymer.

For the full text of the R, H and EUH phrases mentioned in this Section, see Section 16.

Workplace exposure limit(s), if available, are listed in subsection 8.1.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.

[3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

**SECTION 4: First aid measures****4.1 Description of first aid measures****General Information**

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice.

**Inhalation**

Remove from source of exposure. Get medical attention immediately.

**Skin contact**

Immediately wash off with plenty of water. Take off all contaminated clothing immediately. Get medical attention.

**Eye contact**

Wash off immediately with plenty of water. Get medical attention immediately.

**Ingestion**

Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention immediately.

**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**

Harmful. Severe irritant, may cause respiratory tract irritation.

**Skin contact**

Causes severe burns.

**Eye contact**

Causes severe or permanent damage.

**Ingestion**

Harmful. Causes severe burns. Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

**Sensitisation**

No known effects.

**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**

Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing, gloves and eye/face protection.

**6.2 Environmental precautions**

Do not allow to enter drainage system, surface or ground water.

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

Collect mechanically. Ensure adequate ventilation.

**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****Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. Use only with adequate ventilation. Avoid dust formation. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

**Prevention of fire and explosion**

No special precautions required.

**7.2 Conditions for safe storage, including any incompatibilities****Requirements for storage rooms / facilities:**

In accordance with local and national regulations.

**Combined storage in storage rooms / facilities:**

In accordance with local and national regulations. For incompatible materials see subsection 10.5.

**Basic storage conditions**

Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

**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)    | EU - Long term value(s) | EU - Short term value(s) | UK - Long term value(s) | UK - Short term value(s) |
|------------------|-------------------------|--------------------------|-------------------------|--------------------------|
| sodium hydroxide |                         |                          |                         | 2 mg/m <sup>3</sup>      |

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                          | No data available          | No data available             | No data available         | No data available            |
| tetrasodium ethylene diamine tetraacetate | No data available          | No data available             | No data available         | 25                           |
| sodium alkylbenzenesulphonate             | No data available          | No data available             | No data available         | No data available            |

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 %                        | No data available                        | No data available         | No data available                       |
| tetrasodium ethylene diamine tetraacetate | No data available          | No data available                        | No data available         | No data available                       |
| sodium alkylbenzenesulphonate             | No data available          | No data available                        | No data available         | No data available                       |

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 %                        | No data available                        | No data available         | No data available                       |
| tetrasodium ethylene diamine tetraacetate | No data available          | No data available                        | No data available         | No data available                       |
| sodium alkylbenzenesulphonate             | No data available          | No data available                        | No data available         | No data available                       |

DNEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

| Ingredient(s)                             | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium hydroxide                          | No data available          | No data available             | 1                         | No data available            |
| tetrasodium ethylene diamine tetraacetate | 2.5                        | 2.5                           | 2.5                       | 2.5                          |
| sodium alkylbenzenesulphonate             | No data available          | No data available             | No data available         | No data available            |

DNEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

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| Ingredient(s)                             | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium hydroxide                          | No data available          | No data available             | 1                         | No data available            |
| tetrasodium ethylene diamine tetraacetate | 1.5                        | 1.5                           | 1.5                       | 1.5                          |
| sodium alkylbenzenesulphonate             | No data available          | No data available             | No data available         | No data available            |

**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                          | No data available           | No data available            | No data available   | No data available             |
| tetrasodium ethylene diamine tetraacetate | 2.2                         | 0.22                         | 1.2                 | 43                            |
| sodium alkylbenzenesulphonate             | 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/m <sup>3</sup> ) |
|---|------------------------------|--------------------------|-------------------|--------------------------|
| sodium hydroxide                          | No data available            | No data available        | No data available | No data available        |
| tetrasodium ethylene diamine tetraacetate | No data available            | No data available        | 0.72              | No data available        |
| sodium alkylbenzenesulphonate             | No data available            | No data available        | No data available | No data available        |

**8.2 Exposure controls****General health and safety measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Take off immediately all contaminated clothing. Wash hands before breaks and at the end of workday. Do not breathe dust. Avoid contact with skin and eyes.

*The following information applies for the uses indicated in subsection 1.2.*

*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:*

**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).

**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:  $\geq$  480 min

Material thickness:  $\geq$  0.7 mm

Suggested gloves for protection against splashes:

Material: nitrile rubber

Penetration time:  $\geq$  30 min

Material thickness:  $\geq$  0.4 mm

**Body protection:**

In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.

**Respiratory protection:**

If exposure to dust cannot be avoided use: half mask (EN 140) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. with particle filter P2 (EN 143)

**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 (%):** 4

**Appropriate engineering controls:** The product is intended to be used in closed systems.

**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

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**Personal protective equipment .****Eye / face protection:**

Safety glasses or goggles (EN 166).

**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:  $\geq$  480 minMaterial thickness:  $\geq$  0.7 mm

Suggested gloves for protection against splashes:

Material: nitrile rubber

Penetration time:  $\geq$  30 minMaterial thickness:  $\geq$  0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

**Body protection:**

No special requirements under normal use conditions.

**Respiratory protection:**

If the product is applied in a closed system, as recommended, no respiratory protection equipment will be required.

**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:** Solid**Colour:** White**Odour:** Product specific**Odour threshold:** Not applicable.**pH:****Dilution pH:**  $>$  12 (1%)**Melting point/freezing point (°C):** Not determined**Initial boiling point and boiling range (°C):** Not determined**Flash point (°C):** Not applicable.**Sustained combustion:** Not determined**Evaporation rate:** Not determined**Flammability (solid, gas):** Not determined**Upper/lower flammability limit (%):** Not determined**Vapour pressure:** Not determined**Vapour density:** Not determined**Relative density:** 0.95 g/cm<sup>3</sup> (20°C)**Solubility in / Miscibility with Water:** Soluble**Autoignition temperature:** Not determined**Decomposition temperature:** Not determined**Viscosity:** Not determined**Explosive properties:** Not explosive.**Oxidising properties:** Not oxidising.**9.2 Other information****Surface tension (N/m):** Not determined**Corrosion to metals****(according to IMDG/ADR regulation):** Not determined**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****Mixtures**

No test data is available on the mixture

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                          | LD <sub>50</sub> | 1350              | Rat     | Method not given   |                   |
| tetrasodium ethylene diamine tetraacetate | LD <sub>50</sub> | >= 1780           | Rat     | Non guideline test |                   |
| sodium alkylbenzenesulphonate             |                  | No data available |         |                    |                   |

Acute dermal toxicity

| Ingredient(s)                             | Endpoint         | Value (mg/kg)     | Species | Method           | Exposure time (h) |
|---|------------------|-------------------|---------|------------------|-------------------|
| sodium hydroxide                          | LD <sub>50</sub> | 1350              | Rabbit  | Method not given |                   |
| tetrasodium ethylene diamine tetraacetate |                  | No data available |         |                  |                   |
| sodium alkylbenzenesulphonate             |                  | No data available |         |                  |                   |

Acute inhalative toxicity

| Ingredient(s)                             | Endpoint         | Value (mg/l)      | Species | Method            | Exposure time (h) |
|---|------------------|-------------------|---------|-------------------|-------------------|
| sodium hydroxide                          | LC <sub>50</sub> | 4800              | Mouse   | Method not given  | 1                 |
| tetrasodium ethylene diamine tetraacetate | LC <sub>50</sub> | >= 1              | Rat     | OECD 403 (EU B.2) | 6                 |
| sodium alkylbenzenesulphonate             |                  | 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 ethylene diamine tetraacetate | Not irritant      |         | Method not given |               |
| sodium alkylbenzenesulphonate             | No data available |         |                  |               |

Eye irritation and corrosivity

| Ingredient(s)                             | Result            | Species | Method           | Exposure time |
|---|-------------------|---------|------------------|---------------|
| sodium hydroxide                          | Corrosive         | Rabbit  | Method not given |               |
| tetrasodium ethylene diamine tetraacetate | Severe damage     |         | Method not given |               |
| sodium alkylbenzenesulphonate             | No data available |         |                  |               |

Respiratory tract irritation and corrosivity

| Ingredient(s)                             | Result            | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| sodium hydroxide                          | No data available |         |        |               |
| tetrasodium ethylene diamine tetraacetate | No data available |         |        |               |
| sodium alkylbenzenesulphonate             | No data available |         |        |               |

**Sensitisation**

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## Sensitisation by skin contact

| Ingredient(s)                             | Result            | Species    | Method                    | Exposure time (h) |
|---|-------------------|------------|---------------------------|-------------------|
| sodium hydroxide                          | Not sensitising   |            | Human repeated patch test |                   |
| tetrasodium ethylene diamine tetraacetate | Not sensitising   | Guinea pig | OECD 406 (EU B.6) / GPMT  |                   |
| sodium alkylbenzenesulphonate             | No data available |            |                           |                   |

## Sensitisation by inhalation

| Ingredient(s)                             | Result            | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| sodium hydroxide                          | No data available |         |        |               |
| tetrasodium ethylene diamine tetraacetate | No data available |         |        |               |
| sodium alkylbenzenesulphonate             | No data 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 ethylene diamine tetraacetate |          | No data available  |         |        |                      |                                      |
| sodium alkylbenzenesulphonate             |          | 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 ethylene diamine tetraacetate |          | No data available  |         |        |                      |                                      |
| sodium alkylbenzenesulphonate             |          | 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 ethylene diamine tetraacetate |          | No data available  |         |        |                      |                                      |
| sodium alkylbenzenesulphonate             |          | 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 ethylene diamine tetraacetate |                |          | No data available  |         |        |               |                                      |        |
| sodium alkylbenzenesulphonate             |                |          | No data available  |         |        |               |                                      |        |

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

## Mixture data:

Based on available data, the classification criteria are not met.

Substance data, where relevant and available

## Carcinogenicity

| Ingredient(s)                             | Effect  |
|---|---|
| sodium hydroxide                          | No evidence for carcinogenicity, weight-of-evidence |
| tetrasodium ethylene diamine tetraacetate | No evidence for carcinogenicity, weight-of-evidence |
| sodium alkylbenzenesulphonate             | No data available                                   |

## Mutagenicity

| Ingredient(s) | Result (in-vitro) | Method (in-vitro) | Result (in-vivo) | Method (in-vivo) |
|---------------|-------------------|-------------------|------------------|------------------|
|               |                   |                   |                  |                  |

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|---|---|---|---|---------------------------------------|
| 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 ethylene diamine tetraacetate | No evidence for mutagenicity, negative test results |   | No evidence of genotoxicity, negative test results  |                                       |
| sodium alkylbenzenesulphonate             | No data available                                   |   | 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 ethylene diamine tetraacetate |          |                 | No data available  |         |        |               | No evidence for reproductive toxicity  |
| sodium alkylbenzenesulphonate             |          |                 | No data available  |         |        |               |  |

## 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

#### Mixtures

No test 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 <sub>50</sub> | 35                | Various species     | Method not given       | 96                |
| tetrasodium ethylene diamine tetraacetate | LC <sub>50</sub> | > 100             | Lepomis macrochirus | OPP 72-1, static (EPA) | 96                |
| sodium alkylbenzenesulphonate             |                  | No data available |                     |                        |                   |

##### Aquatic short-term toxicity - crustacea

| Ingredient(s)                             | Endpoint         | Value (mg/l)      | Species              | Method             | Exposure time (h) |
|---|------------------|-------------------|----------------------|--------------------|-------------------|
| sodium hydroxide                          | EC <sub>50</sub> | 40.4              | Ceriodaphnia sp.     | Method not given   | 48                |
| tetrasodium ethylene diamine tetraacetate | EC <sub>50</sub> | > 100             | Daphnia magna Straus | DIN 38412, Part 11 | 48                |
| sodium alkylbenzenesulphonate             |                  | No data available |                      |                    |                   |

##### Aquatic short-term toxicity - algae

| Ingredient(s)                             | Endpoint         | Value (mg/l)      | Species                    | Method           | Exposure time (h) |
|---|------------------|-------------------|----------------------------|------------------|-------------------|
| sodium hydroxide                          | EC <sub>50</sub> | 22                | Photobacterium phosphoreum | Method not given | 0.25              |
| tetrasodium ethylene diamine tetraacetate | EC <sub>50</sub> | > 100             | Scenedesmus obliquus       |                  | 72                |
| sodium alkylbenzenesulphonate             |                  | 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 ethylene diamine tetraacetate |          | No data available |         |        |                      |
| sodium alkylbenzenesulphonate             |          | No data available |         |        |                      |

##### Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---------------|----------|--------------|----------|--------|---------------|
|               |          |              |          |        |               |



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|   |                  |                   |                  |          |             |
|---|------------------|-------------------|------------------|----------|-------------|
| sodium hydroxide                          |                  | No data available |                  |          |             |
| tetrasodium ethylene diamine tetraacetate | EC <sub>20</sub> | > 500             | Activated sludge | OECD 209 | 0.5 hour(s) |
| sodium alkylbenzenesulphonate             |                  | 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 ethylene diamine tetraacetate | NOEC     | >= 36.9           | Brachydanio rerio | OECD 210 | 35 day(s)     |                  |
| sodium alkylbenzenesulphonate             |          | 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 ethylene diamine tetraacetate | NOEC     | 25                | Daphnia magna | OECD 211 | 21 day(s)     |                  |
| sodium alkylbenzenesulphonate             |          | No data available |               |          |               |                  |

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if 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 |
|---|------------------|-----------------------|----------------|--------|----------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | LD <sub>50</sub> | 156                   | Eisenia fetida |        | 14                   |                  |

Terrestrial toxicity - plants, if available:

| Ingredient(s)                             | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---|----------|-----------------------|---------|--------|----------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | NOEC     | 0.25 - 1.25           |         |        | 21                   |                  |

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if 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 <sub>50</sub> | Method | Evaluation                           |
|---|----------|-------------------|------------------|--------|--------------------------------------|
| sodium hydroxide                          |          |                   |                  |        | Not applicable (inorganic substance) |
| tetrasodium ethylene diamine tetraacetate |          |                   |                  |        | Readily biodegradable                |
| sodium alkylbenzenesulphonate             |          |                   |                  |        | No data available                    |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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**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 ethylene diamine tetraacetate | No data available |        |                                      |        |
| sodium alkylbenzenesulphonate             | No data available |        |                                      |        |

Bioconcentration factor (BCF)

| Ingredient(s)                             | Value             | Species             | Method | Evaluation                        | Remark |
|---|-------------------|---------------------|--------|-----------------------------------|--------|
| sodium hydroxide                          | No data available |                     |        |                                   |        |
| tetrasodium ethylene diamine tetraacetate | 1.8               | Lepomis macrochirus |        | Low potential for bioaccumulation |        |
| sodium alkylbenzenesulphonate             | 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 ethylene diamine tetraacetate | No data available              |                                     |        |                    |                |
| sodium alkylbenzenesulphonate             | 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** Dispose of in compliance with all Federal, state, provincial, and local laws and regulations.  
**European Waste Catalogue:** 20 01 15\* - alkalines.

**Empty packaging**

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

**SECTION 14: Transport information****ADR, RID, ADN, IMO/IMDG, ICAO/IATA****14.1 UN number:** 1823**14.2 UN proper shipping name:**

Sodium hydroxide, solid, mixture

**14.3 Transport hazard class(es):****Class:**8**Label(s):**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 73/78 and the IBC Code:** The product is not transported in bulk tankers.**Other relevant information:****ADR****Classification Code** C6**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

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

|                                 |          |
|---------------------------------|----------|
| EDTA and salts thereof          | 15 - 30% |
| anionic surfactants, phosphates | < 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*

**MSDS code:** MSDS3619

**Version** 07

**Revision:** 2012-12-06

#### Reason for revision:

Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II, This data sheet contains changes from the previous version in section(s): 2, 3, 16

#### Full text of the R, H and EUH phrases mentioned in section 3

- R35 - Causes severe burns.
- R41 - Risk of serious damage to eyes.
- R38 - Irritating to skin.
- R22 - Harmful if swallowed.
- R20/22 - Harmful by inhalation and if swallowed.
- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H332 - Harmful if inhaled.

#### 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

**End of Safety Data Sheet**