

Enduroplus VE6

Revision: 2012-08-10

Version 03

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

1.1 Product identifier

Trade name: Enduroplus VE6

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

Identified uses:

For industrial use only.

AISE-P806 - Foam cleaner. Semi-automatic with venting process

AISE-P807 - Foam cleaner. Semi-automatic without venting 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

N - Dangerous for the environment

Risk phrases:

R31 - Contact with acids liberates toxic gas.

R35 - Causes severe burns.

R50 - Very toxic to aquatic organisms.

2.2 Label elements



C - Corrosive

N - Dangerous for the environment

Contains sodium hydroxide, potassium hydroxide, sodium hypochlorite

Risk phrases:

R31 - Contact with acids liberates toxic gas.

R35 - Causes severe burns.

R50 - Very toxic to aquatic organisms.

Safety phrases:

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).

S61b - Avoid release to the environment. Refer to safety data sheet.

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

2.3 Other hazards

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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) | | 3-10 |
| sodium hypochlorite | 231-668-3 | 7681-52-9 | 01-2119488154-34 | C,N; R31-34-50 | Skin Corr. 1B (H314) Aquatic Acute 1 (H400) (EUH031) | | 3-10 |
| sodium xylene sulphonate | 215-090-9 | 1300-72-7 | 01-2119513350-56 | Xi; R36/37/38 | Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) | | 3-10 |
| potassium hydroxide | 215-181-3 | 1310-58-3 | 01-2119487136-33 | C; R22-35 | Skin Corr. 1A (H314) Met. Corr. 1 (H290) Acute Tox. 4 (H302) | | 1-3 |
| N,N-dimethyltetradecylamine N-oxide | 222-059-3 | 3332-27-2 | No data available | Xi,N; R38-41-50 | Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Skin Irrit. 2 (H315) | | 0.1-1 |
| amines, C10-16 alkyldimethyl-,N-oxides | 274-687-2 | 70592-80-2 | No data available | Xn,N; R22-38-41-50 | Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) | | 0.1-1 |

* 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

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

May cause bronchospasm in chlorine sensitive individuals. Severe irritant, may cause respiratory tract irritation.

Skin contact

Causes severe burns.

Eye contact

Causes severe or permanent damage.

Ingestion

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

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6.1 Personal precautions, protective equipment and emergency procedures

In case of an incident in a confined area wear suitable respiratory protection. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

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****Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. 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. Store away from acids.

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 ³ |
| potassium hydroxide | | | | 2 mg/m ³ |

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 |
| sodium hypochlorite | No data available | No data available | No data available | 0.26 |
| sodium xylene sulphonate | No data available | No data available | No data available | No data available |
| potassium hydroxide | No data available | No data available | No data available | No data available |
| N,N-dimethyltetradecylamine N-oxide | No data available | No data available | No data available | No data available |
| amines, C10-16 alkyldimethyl-,N-oxides | 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 |
| sodium hypochlorite | No data available | No data available | 0.5 % | No data available |
| sodium xylene sulphonate | No data available | No data available | No data available | No data available |

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| | | | | |
|--|-------------------|-------------------|-------------------|-------------------|
| potassium hydroxide | No data available | No data available | No data available | No data available |
| N,N-dimethyltetradecylamine N-oxide | No data available | No data available | No data available | No data available |
| amines, C10-16 alkyldimethyl-,N-oxides | 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 |
| sodium hypochlorite | No data available | No data available | 0.5 % | No data available |
| sodium xylene sulphonate | No data available | No data available | No data available | No data available |
| potassium hydroxide | No data available | No data available | No data available | No data available |
| N,N-dimethyltetradecylamine N-oxide | No data available | No data available | No data available | No data available |
| amines, C10-16 alkyldimethyl-,N-oxides | No data available | No data available | No data available | No data available |

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 | No data available | No data available | 1 | No data available |
| sodium hypochlorite | 3.1 | 3.1 | 1.55 | 1.55 |
| sodium xylene sulphonate | No data available | No data available | No data available | No data available |
| potassium hydroxide | No data available | No data available | 1 | No data available |
| N,N-dimethyltetradecylamine N-oxide | No data available | No data available | No data available | No data available |
| amines, C10-16 alkyldimethyl-,N-oxides | No data available | No data available | No data available | No data available |

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 | No data available | No data available | 1 | No data available |
| sodium hypochlorite | 3.1 | 3.1 | 1.55 | 1.55 |
| sodium xylene sulphonate | No data available | No data available | No data available | No data available |
| potassium hydroxide | No data available | No data available | 1 | No data available |
| N,N-dimethyltetradecylamine N-oxide | No data available | No data available | No data available | No data available |
| amines, C10-16 alkyldimethyl-,N-oxides | 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 |
| sodium hypochlorite | 0.00021 | 0.00042 | No data available | 0.03 |
| sodium xylene sulphonate | No data available | No data available | No data available | No data available |
| potassium hydroxide | No data available | No data available | No data available | No data available |
| N,N-dimethyltetradecylamine N-oxide | No data available | No data available | No data available | No data available |
| amines, C10-16 alkyldimethyl-,N-oxides | 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 ³) |
|--|------------------------------|--------------------------|-------------------|--------------------------|
| sodium hydroxide | No data available | No data available | No data available | No data available |
| sodium hypochlorite | No data available | No data available | No data available | 0.00026 |
| sodium xylene sulphonate | No data available | No data available | No data available | No data available |
| potassium hydroxide | No data available | No data available | No data available | No data available |
| N,N-dimethyltetradecylamine N-oxide | No data available | No data available | No data available | No data available |
| amines, C10-16 alkyldimethyl-,N-oxides | 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. 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:

Use only in well ventilated areas. 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).

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|---|--|
| 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 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. |
| Respiratory protection: | No special requirements under normal use conditions |
| Environmental exposure controls: | Should not reach sewage water or drainage ditch undiluted. |

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 10

| | |
|---|---|
| Appropriate engineering controls: | Ensure that foam equipment does not generate respirable particles. |
| 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) are always recommended for foam applications. |
| Hand protection: | Chemical-resistant protective gloves (EN 374) are always recommended for foam applications 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 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: | 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

| | |
|---|-------------------------------|
| Physical State: | Liquid |
| Colour | Clear Pale Yellow |
| Odour | Chlorine |
| pH: | > 12 (neat) |
| Boiling point/range (°C): | Not determined |
| Flash point (°C): | \approx 100 closed cup |
| Flammability | Not flammable. |
| Specific gravity: | 1.23 g/cm ³ (20°C) |
| Solubility in / Miscibility with | Water: Fully miscible |
| Explosive properties | Not explosive. |
| Oxidising properties: | Not oxidising. |

9.2 Other information

No other relevant information 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 releasing toxic chlorine gas.

10.6 Hazardous decomposition products

Chlorine.

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 ₅₀ | 500 | Rabbit | Method not given | |
| sodium hypochlorite | LD ₅₀ | > 1100 | Rat | Method not given | |
| sodium xylene sulphonate | LD ₅₀ | > 7000 | Rat | Method not given | |
| potassium hydroxide | LD ₅₀ | 333 | Rat | OECD 425 | |
| N,N-dimethyltetradecylamine N-oxide | LD ₅₀ | > 2000 | Rat | Method not given | |
| amines, C10-16 alkyldimethyl-,N-oxides | | 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 | |
| sodium hypochlorite | LD ₅₀ | > 20000 | Rabbit | Method not given | |
| sodium xylene sulphonate | LD ₅₀ | > 2000 | Rabbit | Method not given | |
| potassium hydroxide | | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | |
| amines, C10-16 alkyldimethyl-,N-oxides | | No data available | | | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|------------------|-------------------|---------|------------------|-------------------|
| sodium hydroxide | LC ₅₀ | 4800 | Mouse | Method not given | 1 |
| sodium hypochlorite | LC ₅₀ | > 10500 | Rat | Method not given | 1 |
| sodium xylene sulphonate | | No data available | | | |
| potassium hydroxide | | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | |
| amines, C10-16 alkyldimethyl-,N-oxides | | No data available | | | |

Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|-------------------|---------------|
| sodium hydroxide | Corrosive | Rabbit | Method not given | |
| sodium hypochlorite | Corrosive | Rabbit | Method not given | |
| sodium xylene sulphonate | Mild irritant | Rabbit | OECD 404 (EU B.4) | |
| potassium hydroxide | Mild irritant | Rabbit | Method not given | |
| N,N-dimethyltetradecylamine N-oxide | Irritant | Rabbit | Method not given | |
| amines, C10-16 alkyldimethyl-,N-oxides | No data available | | | |

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Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|-------------------|---------------|
| sodium hydroxide | Corrosive | Rabbit | Method not given | |
| sodium hypochlorite | Severe damage | Rabbit | Method not given | |
| sodium xylene sulphonate | Irritant | Rabbit | OECD 405 (EU B.5) | |
| potassium hydroxide | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | Severe damage | Rabbit | Method not given | |
| amines, C10-16 alkylidimethyl-,N-oxides | No data available | | | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---------------------------------|---------|--------|---------------|
| sodium hydroxide | No data available | | | |
| sodium hypochlorite | Irritating to respiratory tract | | | |
| sodium xylene sulphonate | No data available | | | |
| potassium hydroxide | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | No data available | | | |
| amines, C10-16 alkylidimethyl-,N-oxides | No data available | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|---|-------------------|------------|---------------------------|-------------------|
| sodium hydroxide | Not sensitising | | Human repeated patch test | |
| sodium hypochlorite | Not sensitising | Guinea pig | Method not given | |
| sodium xylene sulphonate | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| potassium hydroxide | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | No data available | | | |
| amines, C10-16 alkylidimethyl-,N-oxides | No data available | | | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| sodium hydroxide | No data available | | | |
| sodium hypochlorite | No data available | | | |
| sodium xylene sulphonate | No data available | | | |
| potassium hydroxide | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | No data available | | | |
| amines, C10-16 alkylidimethyl-,N-oxides | 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 | | | | |
| sodium hypochlorite | NOAEL | 50 | Rat | Method not given | 90 | |
| sodium xylene sulphonate | NOAEL | 763 - 3534 | Rat | OECD 408 (EU B.26) | 90 d | |
| potassium hydroxide | | No data available | | | | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | | |
| amines, C10-16 alkylidimethyl-,N-oxides | | 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 | | | | |
| sodium hypochlorite | | No data available | | | | |
| sodium xylene sulphonate | NOAEL | > 440 | | OECD 411 (EU B.28) | 90 | |
| potassium hydroxide | | No data available | | | | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | | |

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|---|--|-------------------|--|--|--|--|
| amines, C10-16 alkyl dimethyl-,N-oxides | | 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 | | | | |
| sodium hypochlorite | | No data available | | | | |
| sodium xylene sulphonate | | No data available | | | | |
| potassium hydroxide | | No data available | | | | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | | |
| amines, C10-16 alkyl dimethyl-,N-oxides | | 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 | | | | | |
| sodium hypochlorite | | | No data available | | | | | |
| sodium xylene sulphonate | | | No data available | | | | | |
| potassium hydroxide | | | No data available | | | | | |
| N,N-dimethyltetradecylamine N-oxide | | | No data available | | | | | |
| amines, C10-16 alkyl dimethyl-,N-oxides | | | 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 |
| sodium hypochlorite | No evidence for carcinogenicity, negative test results |
| sodium xylene sulphonate | No evidence for carcinogenicity, negative test results |
| potassium hydroxide | No evidence for carcinogenicity, negative test results |
| N,N-dimethyltetradecylamine N-oxide | No data available |
| amines, C10-16 alkyl dimethyl-,N-oxides | No data available |

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) |
| sodium hypochlorite | No evidence for mutagenicity, weight of evidence | | No evidence for mutagenicity, negative test results | |
| sodium xylene sulphonate | No data available | | No evidence for mutagenicity, negative test results | OECD 474 (EU B.12) |
| potassium hydroxide | No evidence for mutagenicity, negative test results | | No data available | |
| N,N-dimethyltetradecylamine N-oxide | No data available | | No data available | |
| amines, C10-16 alkyl dimethyl-,N-oxides | 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 |
| sodium hypochlorite | NOAEL | Developmental toxicity | 5 (Cl) | Rat | Not known | | No evidence for reproductive toxicity |
| sodium xylene sulphonate | NOAEL | | > 936 | Rat | Non guideline test | | |

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|--|--|--|-------------------|--|--|--|---------------------------------------|
| potassium hydroxide | | | No data available | | | | No evidence for reproductive toxicity |
| N,N-dimethyltetradecylamine N-oxide | | | No data available | | | | |
| amines, C10-16 alkyldimethyl-,N-oxides | | | 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 ₅₀ | 35 | Various species | Method not given | 96 |
| sodium hypochlorite | LC ₅₀ | 0.06 | Various species | Method not given | 96 |
| sodium xylene sulphonate | LC ₅₀ | > 1000 | Fish | EPA-OPPTS | 96 |
| potassium hydroxide | LC ₅₀ | 80 | Various species | Method not given | 24 |
| N,N-dimethyltetradecylamine N-oxide | LC ₅₀ | 10 - 100 | Brachydanio rerio | OECD 203 Read across | 96 |
| amines, C10-16 alkyldimethyl-,N-oxides | | 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 |
| sodium hypochlorite | EC ₅₀ | 0.026 | Not specified | Method not given | 48 |
| sodium xylene sulphonate | EC ₅₀ | > 1000 | Daphnia | EPA-OPPTS | 48 |
| potassium hydroxide | EC ₅₀ | 30 - 1000 | Daphnia magna Straus | | |
| N,N-dimethyltetradecylamine N-oxide | EC ₅₀ | 11.1 | Daphnia magna Straus | OECD 202 | 48 |
| amines, C10-16 alkyldimethyl-,N-oxides | | 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 |
| sodium hypochlorite | NOEC | 0.0021 | Not specified | Method not given | 168 |
| sodium xylene sulphonate | EC ₅₀ | > 230 | | US-EPA 1994 | 96 |
| potassium hydroxide | | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | EC ₅₀ | 0.47 | Pseudokirchneriella subcapitata | OECD 201 Read across | 72 |
| amines, C10-16 alkyldimethyl-,N-oxides | | 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 | | | |
| sodium hypochlorite | | No data available | | | |
| sodium xylene sulphonate | | No data available | | | |
| potassium hydroxide | | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | |

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| | | | | |
|--|--|-------------------|--|--|
| amines, C10-16 alkyldimethyl-,N-oxides | | 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 | | | |
| sodium hypochlorite | | 0.375 | Activated sludge | Method not given | |
| sodium xylene sulphonate | E _r C ₅₀ | > 1000 | Activated sludge | OECD 209 | 3 hour(s) |
| potassium hydroxide | | No data available | | | |
| N,N-dimethyltetradecylamine N-oxide | EC ₅₀ | 56 | Pseudomonas putida | DIN 38412 / Part 8 Read across | |
| amines, C10-16 alkyldimethyl-,N-oxides | | 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 | | | | |
| sodium hypochlorite | NOEC | 0.04 | Menidia pelinsulae | Method not given | 96 hour(s) | |
| sodium xylene sulphonate | | No data available | | | | |
| potassium hydroxide | | No data available | | | | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | | |
| amines, C10-16 alkyldimethyl-,N-oxides | | 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 | | | | |
| sodium hypochlorite | | No data available | | | | |
| sodium xylene sulphonate | | No data available | | | | |
| potassium hydroxide | | No data available | | | | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | | |
| amines, C10-16 alkyldimethyl-,N-oxides | | 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:

Terrestrial toxicity - plants, if available:

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 | |
| sodium hypochlorite | 115 day(s) | Indirect photo-oxidation | | |

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

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Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT ₅₀ | Method | Evaluation |
|--|----------|-------------------|---------------------|-----------|--------------------------------------|
| sodium hydroxide | | | | | Not applicable (inorganic substance) |
| sodium hypochlorite | | | | | No data available |
| sodium xylene sulphonate | | | 99.8% in 28 day(s) | OECD 301B | Readily biodegradable |
| potassium hydroxide | | | | | Not applicable (inorganic substance) |
| N,N-dimethyltetradecylamine N-oxide | | | > 60 % in 28 day(s) | OECD 301D | Readily biodegradable |
| amines, C10-16 alkyldimethyl-,N-oxides | | | | | 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.

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 | |
| sodium hypochlorite | No data available | | | |
| sodium xylene sulphonate | -3.2 | Method not given | Low potential for bioaccumulation | |
| potassium hydroxide | No data available | | Not relevant, does not bioaccumulate | |
| N,N-dimethyltetradecylamine N-oxide | No data available | | No bioaccumulation expected | |
| amines, C10-16 alkyldimethyl-,N-oxides | No data available | | | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|--|-------------------|---------|--------|------------|--------|
| sodium hydroxide | No data available | | | | |
| sodium hypochlorite | No data available | | | | |
| sodium xylene sulphonate | No data available | | | | |
| potassium hydroxide | No data available | | | | |
| N,N-dimethyltetradecylamine N-oxide | No data available | | | | |
| amines, C10-16 alkyldimethyl-,N-oxides | 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 |
| sodium hypochlorite | 1 | | | | High potential for mobility in soil |
| sodium xylene sulphonate | No data available | | | | |
| potassium hydroxide | No data available | | | | Low potential for adsorption to soil |
| N,N-dimethyltetradecylamine N-oxide | No data available | | | | |
| amines, C10-16 alkyldimethyl-,N-oxides | 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**

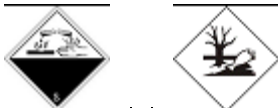
Waste from residues / unused products Dispose of in compliance with all Federal, state, provincial, and local laws and regulations.
European Waste Catalogue: 20 01 15* - alkalines.

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Empty packaging
Recommendation:
Suitable cleaning agents

Dispose of observing national or local regulations.
Water, if necessary with cleaning agent.

SECTION 14: Transport information



ADR, RID, ADN, IMO/IMDG, ICAO/IATA

14.1 UN number: 1719

14.2 UN proper shipping name:

Caustic alkali liquid, n.o.s. (sodium hydroxide , hypochlorite)

14.3 Transport hazard class(es):

Class:8

Label(s):8

14.4 Packing group: II

14.5 Environmental hazards:

Environmentally hazardous:Yes

Marine pollutant Yes

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 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

Ingredients according to EC Detergents Regulation 648/2004

chlorine-based bleaching agents

5 - 15%

anionic surfactants, non-ionic surfactants, phosphonates, soap

< 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: MSDS4095

Version 03

Revision: 2012-08-10

Reason for revision:

Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II

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

- R35 - Causes severe burns.
- R34 - Causes burns.
- R50 - Very toxic to aquatic organisms.
- R31 - Contact with acids liberates toxic gas.
- R22 - Harmful if swallowed.
- R41 - Risk of serious damage to eyes.
- R38 - Irritating to skin.
- R36/37/38 - Irritating to eyes, respiratory system and skin.

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- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- EUH031 - Contact with acids liberates toxic gas.

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