

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Divosan SaniSigma

Revision: 2019-09-08

Version: 02.0

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

1.1 Product identifier

Trade name: Divosan SaniSigma

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

For professional and industrial use only. AISE-P806 - Foam cleaner. Semi-automatic with venting process AISE-P807 - Foam cleaner. Semi-automatic without venting process AISE-P314 - Surface disinfectant. Manual process AISE-P315 - Surface disinfectant. Spray and rinse manual process AISE-P802 - Food process cleaner. Semi-closed cleaning process Soaking bath. Manual process (AISE_CS_I01 & AISE_CS_I10) 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. 1B (H314) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) Met. Corr. 1 (H290) Eye Dam. 1 (H318)

2.2 Label elements



Signal word: Danger.

Contains N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (Laurylamine Dipropylenediamine)

Hazard statements:

H314 - Causes severe skin burns and eye damage.

- H410 Very toxic to aquatic life with long lasting effects.
- H290 May be corrosive to metals.

Precautionary statements:

P260 - Do not breathe vapours.

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 number | REACH number | Classification | Notes | Weight percent |
|--|-----------|------------|------------------|--|-------|-------------------|
| tetrasodium ethylene diamine tetraacetate | 200-573-9 | 64-02-8 | 01-2119486762-27 | Acute Tox. 4 (H302) Acute Tox. 4 (H332) STOT RE 2 (H373) Eye Dam. 1 (H318) | | 3-10 |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | 219-145-8 | 2372-82-9 | 01-2119980592-29 | Acute Tox. 3 (H301) Skin Corr. 1B (H314) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) | | 3-10 |
| sodium xylene sulphonate | 215-090-9 | 1300-72-7 | 01-2119513350-56 | Eye Irrit. 2 (H319) | | 3-10 |
| sodium hydroxide | 215-185-5 | 1310-73-2 | 01-2119457892-27 | Skin Corr. 1A (H314) Met. Corr. 1 (H290) | | 0.1-1 |

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.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

| General Information: | If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is |
|---------------------------------|---|
| | irregular or stopped, administer artificial respiration. 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 reuse. 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 | l effects, both acute and delayed |
| Inhalation: | No known effects or symptoms in normal use. |
| Skin contact: | Causes severe burns. |
| Eve contact: | Causes severe or permanent damage |

| 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

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. 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

Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). 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

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. Do not breathe vapours. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. Keep from freezing. 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/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 |
|--|-------------------------------|----------------------------------|------------------------------|---------------------------------|
| tetrasodium ethylene diamine tetraacetate | - | - | - | 25 |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | - | - | - | 0.2 |
| sodium xylene sulphonate | - | - | - | 3.8 |
| sodium hydroxide | - | - | - | - |

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) |
|--|-------------------------------|---|------------------------------|--|
| tetrasodium ethylene diamine tetraacetate | - | - | - | - |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | - | - | - | 0.91 |
| sodium xylene sulphonate | - | - | - | 7.6 |
| sodium hydroxide | 2 % | - | - | - |

DNEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local | Short term - Systemic | Long term - Local | Long term - Systemic |
|---------------|--------------------|-----------------------|-------------------|----------------------|
| | effects | effects (mg/kg bw) | effects | effects (mg/kg bw) |

| tetrasodium ethylene diamine tetraacetate | - | - | - | - |
|--|-----|---|---|------|
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | - | - | - | 0.54 |
| sodium xylene sulphonate | - | - | - | 3.8 |
| sodium hydroxide | 2 % | - | - | - |

DNEL inhalatory exposure - Worker (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|--|-------------------------------|----------------------------------|------------------------------|---------------------------------|
| tetrasodium ethylene diamine tetraacetate | 3 | 3 | 1.5 | 1.5 |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | No data available | No data available | No data available | 2.35 |
| sodium xylene sulphonate | - | - | - | 53.6 |
| sodium hydroxide | No data available | - | 1 | - |

DNEL inhalatory exposure - Consumer (mg/m³)

| Ingredient(s) | Short term - Local | Short term - Systemic | Long term - Local | Long term - Systemic |
|--|--------------------|-----------------------|-------------------|----------------------|
| | effects | effects | effects | effects |
| tetrasodium ethylene diamine tetraacetate | 1.2 | 1.2 | 0.6 | - |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | No data available | No data available | No data available | 0.7 |
| sodium xylene sulphonate | - | - | - | 13.2 |
| sodium hydroxide | - | - | 1 | - |

Environmental exposure

| Ingredient(s) | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|--|--------------------------------|---------------------------------|---------------------|----------------------------------|
| tetrasodium ethylene diamine tetraacetate | 2.2 | 0.22 | 1.2 | 43 |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | 0.001 | 0.0001 | 0.00015 | 1.33 |
| sodium xylene sulphonate | 0.23 | 0.023 | 2.3 | 100 |
| sodium hydroxide | - | - | - | - |

Environmental exposure - PNEC, continued

| Ingredient(s) | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m³) |
|--|---------------------------------|-----------------------------|--------------|-------------|
| tetrasodium ethylene diamine tetraacetate | - | - | 0.72 | - |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | 8.5 | 0.85 | 45.34 | - |
| sodium xylene sulphonate | 0.862 | 0.0862 | 0.037 | - |
| sodium hydroxide | - | - | - | - |

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 <u>undiluted</u> product: Covering activities such as filling and transfer of product to application equipment, flasks or buckets

| Appropriate engineering controls: Appropriate organisational 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. Avoid direct contact and/or splashes where possible. Train personnel. |
|---|--|
| Appropriate organisational controls. | Avoid direct contact and/or spiasnes 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: | Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided. |
| Environmental exposure controls: | Should not reach sewage water or drainage ditch undiluted or unneutralised. |

Recommended safety measures for handling the <u>diluted</u> product:

Recommended maximum concentration (%): 1

| Appropriate engineering controls: Appropriate organisational controls: | Provide a good standard of general ventilation. Ensure that foam equipment does not generate respirable particles. No special requirements under normal use conditions. |
|---|--|
| Personal protective equipment Eye / face protection: Hand protection: | Safety glasses or goggles (EN 166) are always recommended for foam applications. 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: ≥ 480 min Material thickness: ≥ 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 Information in this section refers to the product, unless it is specifically stated that substance data is listed

Physical State: Liquid
Colour: Clear, Colourless
Odour: Product specific
Odour threshold: Not applicable
pH > 12 (neat)
Dilution pH: > 11
Melting point/freezing point (°C): Not determined
Initial boiling point and boiling range (°C): Not determined

Method / remark

ISO 4316 ISO 4316 Not relevant to classification of this product See substance data

| Substance data, boiling point | | | |
|--|-------------------|-----------------------|-------------------------------|
| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
| tetrasodium ethylene diamine tetraacetate | No data available | Non-experimental data | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | No data available | | |
| sodium xylene sulphonate | > 100 | Method not given | |
| sodium hydroxide | > 990 | Method not given | |

Flammability (liquid): Not flammable. Flash point (°C): not determined

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:

Vapour pressure: Not determined

Method / remark

Product contains no substance(s) with flash point < 100 $^\circ\text{C}$

Not relevant to classification of this product

Method / remark

See substance data

Substance data, vapour pressure Ingredient(s) Value Method Temperature (Pa) (°C) tetrasodium ethylene diamine tetraacetate 0.000000002 Read across 25 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine No data available sodium xylene sulphonate Not applicable sodium hydroxide < 1330 Method not given 20

Vapour density: Not determined Relative density: \approx 1.15 (20 °C) Solubility in / Miscibility with Water: Fully miscible Method / remark

Not relevant to classification of this product OECD 109 (EU A.3)

Substance data, solubility in water

| Ingredient(s) | Value | Method | Temperature |
|---------------|-------|--------|-------------|
| | (g/l) | | (°C) |

| tetrasodium ethylene diamine tetraacetate | 500 | Method not given | 20 |
|--|---------|------------------|----|
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | Soluble | | |
| sodium xylene sulphonate | 664 | Method not given | |
| sodium hydroxide | 1000 | Method not given | 20 |

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

Autoignition temperature: Not determined Decomposition temperature: Not applicable. Viscosity: Not determined Explosive properties: Not explosive. Oxidising properties: Not oxidising.

9.2 Other information Surface tension (N/m): Not determined Corrosion to metals: Corrosive

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): >2000 ATE - Inhalatory, mists (mg/l): >5

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

Acute toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|--|----------|----------------------|---------|-------------------|----------------------|
| tetrasodium ethylene diamine tetraacetate | LD 50 | 1780 | Rat | OECD 401 (EU B.1) | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | LD 50 | 261 | Rat | Method not given | |
| sodium xylene sulphonate | LD 50 | > 7200 | Rat | OECD 401 (EU B.1) | |
| sodium hydroxide | | No data available | | | |

Acute dermal toxicity Ingredient(s) Endpoint Value Species Method Exposure (mg/kg) time (h) ID 50 tetrasodium ethylene diamine tetraacetate > 5000 Rabbit Method not given LD 50 Rat N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine > 2000 OECD 402 (EU B.3) sodium xylene sulphonate LD 50 > 2000 Rabbit EPA OPPTS 870.1200 1350 sodium hydroxide LD 50 Rabbit Method not given

| Acute inhalative toxicity | | |
|---------------------------------|-------------|----------|
| Ingredient(s) Endpoint Value Sp | cies Method | Exposure |

nt to classification of this product Weight of evidence

Method / remark

| Not relevan |
|-------------|
| Weight of a |

| | | (mg/l) | | | time (h) |
|--|-------|----------------------|-----|-------------------|----------|
| tetrasodium ethylene diamine tetraacetate | LC 50 | ≥ 1-5 (dust) | Rat | OECD 403 (EU B.2) | 6 |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data available | | | |
| sodium xylene sulphonate | LC o | > 6.41 (mist) | Rat | Method not given | 4 |
| sodium hydroxide | | No data available | | | |

Irritation and corrosivity Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|---------------|---------|-------------------|---------------|
| tetrasodium ethylene diamine tetraacetate | Not irritant | Rabbit | OECD 404 (EU B.4) | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | Corrosive | Rabbit | OECD 404 (EU B.4) | 4 hour(s) |
| sodium xylene sulphonate | Mild irritant | Rabbit | OECD 404 (EU B.4) | |
| sodium hydroxide | Corrosive | Rabbit | Method not given | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|-------------------|---------------|
| tetrasodium ethylene diamine tetraacetate | Severe damage | | Method not given | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | No data available | | | |
| sodium xylene sulphonate | Irritant | Rabbit | OECD 405 (EU B.5) | |
| sodium hydroxide | Corrosive | Rabbit | Method not given | |

| Respiratory tract irritation and corrosivity | | | | |
|--|-------------------|---------|--------|---------------|
| Ingredient(s) | Result | Species | Method | Exposure time |
| tetrasodium ethylene diamine tetraacetate | No data available | | | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | No data available | | | |
| sodium xylene sulphonate | No data available | | | |
| sodium hydroxide | No data available | | | |

Sensitisation Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|--|-----------------|------------|-------------------------------------|-------------------|
| tetrasodium ethylene diamine tetraacetate | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | Not sensitising | Guinea pig | OECD 406 (EU B.6) / Buehler test | |
| sodium xylene sulphonate | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| sodium hydroxide | Not sensitising | | Human repeated patch test | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| tetrasodium ethylene diamine tetraacetate | No data available | | | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | No data available | | | |
| sodium xylene sulphonate | No data available | | | |
| sodium hydroxide | 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) |
|--|---|---|---|---|
| tetrasodium ethylene diamine tetraacetate | No evidence for mutagenicity, negative test results | | No evidence of genotoxicity, negative test results | Method not given |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diami ne | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) OECD 473 OECD 476 | | |
| sodium xylene sulphonate | No evidence for mutagenicity, negative test results | | No evidence for mutagenicity, negative test results | OECD 474 (EU B.12) |
| sodium hydroxide | No evidence for mutagenicity, negative test results | | No evidence for mutagenicity, negative test results | OECD 474 (EU B.12) OECD 475 (EU B.11) |

Carcinogenicity

| Effect |
|--|
| No evidence for carcinogenicity, weight-of-evidence |
| No data available |
| No evidence for carcinogenicity, negative test results |
| No evidence for carcinogenicity, weight-of-evidence |
| |

| Toxicity for reproduction | | | | | | | |
|---------------------------|----------|-----------------|-------|---------|--------|----------|---------------------------|
| Ingredient(s) | Endpoint | Specific effect | Value | Species | Method | Exposure | Remarks and other effects |

| | | | (mg/kg bw/d) | | | time | reported |
|--|-------|---------------------|----------------------|-----|-----------------------|------|--|
| tetrasodium ethylene diamine tetraacetate | | | No data available | | | | No evidence for reproductive toxicity |
| N-(3-aminopropyl)-N-do decylpropane-1,3-diami ne | | | No data available | | | | No evidence for reproductive toxicity |
| sodium xylene sulphonate | NOAEL | Teratogenic effects | > 936 | Rat | Non guideline test | | |
| sodium hydroxide | | | No data available | | | | No evidence for developmental toxicity No evidence for reproductive toxicity |

Repeated dose toxicity

tovioity

| Ingredient(s) | Endpoint | Value | Species | Method | | Specific effects and organs affected |
|--|----------|--------------|---------|--------------|-------------|---|
| | | (mg/kg bw/d) | | | time (days) | affected |
| tetrasodium ethylene diamine tetraacetate | | No data | | | | |
| | | available | | | | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data | | | | |
| | | available | | | | |
| sodium xylene sulphonate | NOAEL | 763 - 3534 | Rat | OECD 408 (EU | 90 | |
| | | | | B.26) | | |
| sodium hydroxide | | No data | | | | |
| | | available | | | | |

Sub-chronic dermal toxicity

| Ingredient(s) | Endpoint | Value | Species | Method | | Specific effects and organs |
|--|----------|--------------|---------|--------------|-------------|-----------------------------|
| | | (mg/kg bw/d) | | | time (days) | affected |
| tetrasodium ethylene diamine tetraacetate | | No data | | | | |
| | | available | | | | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data | | | | |
| | | available | | | | |
| sodium xylene sulphonate | NOAEL | > 440 | | OECD 411 (EU | 90 | |
| | | | | B.28) | | |
| sodium hydroxide | | 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 |
|--|----------|-----------------------|---------|--------|-------------------------|---|
| tetrasodium ethylene diamine tetraacetate | | No data available | | | (uu <i>joj</i> | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data available | | | | |
| sodium xylene sulphonate | | No data available | | | | |
| sodium hydroxide | | 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 |
|--|-------------------|----------|-----------------------|---------|-----------------------|------------------|---|--------|
| tetrasodium ethylene diamine tetraacetate | | | No data available | | | | | |
| N-(3-aminopropyl)-N-do decylpropane-1,3-diami ne | | | No data available | | | | | |
| sodium xylene sulphonate | Oral | | No data available | Rat | OECD 453 (EU B.33) | 24 month(s) | No adverse effects observed | |
| sodium hydroxide | | | No data available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| tetrasodium ethylene diamine tetraacetate | No data available |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | Not applicable |
| sodium xylene sulphonate | No data available |
| sodium hydroxide | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| tetrasodium ethylene diamine tetraacetate | Respiratory tract |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | Kidneys |
| sodium xylene sulphonate | No data available |
| sodium hydroxide | 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.

Exposure time (h)

72

96

96 0.25

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) |
|--|----------|-----------------|------------------------|------------------------|----------------------|
| tetrasodium ethylene diamine tetraacetate | LC 50 | > 100 | Lepomis macrochirus | OPP 72-1, static (EPA) | 96 |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | LC 50 | 0.45 | Lepomis macrochirus | OPP 72-1, static (EPA) | 96 |
| sodium xylene sulphonate | LC 50 | > 1000 | Fish | EPA-OPPTS 850.1075 | 96 |
| sodium hydroxide | LC 50 | 35 | Various species | Method not given | 96 |

| Aquatic short-term toxicity - crustacea | | | | | |
|--|----------|-----------------|-------------------------|---|----------------------|
| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
| tetrasodium ethylene diamine tetraacetate | EC 50 | 140 | Daphnia magna Straus | DIN 38412, Part 11 | 48 |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | EC 50 | 0.073 | Daphnia magna Straus | EPA-OPPTS 850.1010 OECD 202 (EU C.2) | 48 |
| sodium xylene sulphonate | EC 50 | > 1000 | Daphnia | EPA-OPPTS 850.1010 | 48 |
| sodium hydroxide | EC 50 | 40.4 | Ceriodaphnia sp. | Method not given | 48 |

| Aquatic short-term toxicity - algae | | | | |
|--|----------|-----------------|--|-------------------------------|
| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method |
| tetrasodium ethylene diamine tetraacetate | EC 50 | > 100 | Scenedesmus obliquus | 88/302/EEC, Part C, static |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | E r C 50 | 0.054 | Pseudokirchner iella subcapitata | EPA OPPTS 850.5400 |
| sodium xylene sulphonate | EC 50 | > 230 | Not specified | EPA OPPTS 850.5400 |
| sodium hydroxide | EC 50 | 22 | Photobacteriu m phosphoreum | Method not given |

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|--|----------|----------------------|---------|--------|-------------------------|
| tetrasodium ethylene diamine tetraacetate | | No data available | | | - |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data available | | | - |
| sodium xylene sulphonate | | No data available | | | - |
| sodium hydroxide | | No data available | | | - |

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|--|----------|----------------------|---------------------|----------|------------------|
| tetrasodium ethylene diamine tetraacetate | EC 20 | > 500 | Activated sludge | OECD 209 | 0.5 hour(s) |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | EC 50 | 18 | Activated sludge | OECD 209 | 3 hour(s) |
| sodium xylene sulphonate | Er C 50 | > 1000 | Activated sludge | OECD 209 | 3 hour(s) |
| sodium hydroxide | | No data available | | | |

Aquatic long-term toxicity Aquatic long-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|-----------------|-------------|----------|------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | NOEC | > 25.7 | Brachydanio | OECD 210 | 35 day(s) | |
| | | | rerio | | | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data | | | | |

| | available | | |
|--------------------------|----------------------|--|--|
| sodium xylene sulphonate | No data available | | |
| sodium hydroxide | No data available | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|----------------------|------------------|----------|------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | NOEC | 25 | Daphnia magna | OECD 211 | 21 day(s) | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | NOEC | 0.024 | Daphnia magna | OECD 211 | 21 day(s) | |
| sodium xylene sulphonate | | No data available | | | | |
| sodium hydroxide | | 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 |
|--|----------|---------------------------------|---------|--------|-------------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | | No data available | | | - | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data available | | | - | |
| sodium xylene sulphonate | | No data available | | | - | |
| sodium hydroxide | | 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 |
|--|----------|-----------------------------|----------------|----------|-------------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | LD 50 | 156 | Eisenia fetida | OECD 207 | 14 | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | LD 50 | > 1000 | Eisenia fetida | OECD 207 | 14 | |
| sodium xylene sulphonate | | No data available | | | - | |
| 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 |
|--|----------|-----------------------------|---------|--------|-------------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | NOEC | 0.25 - 1.25 | | | 21 | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data available | | | - | |
| sodium xylene sulphonate | | No data available | | | - | |
| sodium hydroxide | | No data available | | | - | |

Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
|--|----------|----------------------|---------|--------|-------------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | | No data available | | | - | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data available | | | - | |
| sodium xylene sulphonate | | No data available | | | - | |
| 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 |
|--|----------|-----------------------------|---------|--------|-------------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | | No data available | | | - | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | No data available | | | - | |
| sodium xylene sulphonate | | No data available | | | - | |
| 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 |
|--|----------|-----------------------------|---------|--------|-------------------------|------------------|
| tetrasodium ethylene diamine tetraacetate | | No data available | | | - | |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | NOEC | 1000 | | | 28 | |
| sodium xylene sulphonate | | No data available | | | - | |
| 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 |
|--|----------|----------------------|------------------------|-----------|--------------------------------------|
| tetrasodium ethylene diamine tetraacetate | | | | | Not readily biodegradable. |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | | Oxygen depletion | 79 % in 28 day(s) | OECD 301D | Readily biodegradable |
| sodium xylene sulphonate | | | 99.8 % in 28 day(s) | OECD 301F | Readily biodegradable |
| sodium hydroxide | | | | | Not applicable (inorganic substance) |

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)

| Farilion coenicient n-octanol/water (log r | (0W) | | | |
|--|-------------------|------------------|-----------------------------|--------|
| Ingredient(s) | Value | Method | Evaluation | Remark |
| tetrasodium ethylene diamine | -13 | Method not given | No bioaccumulation expected | |
| tetraacetate | | | | |
| N-(3-aminopropyl)-N-dodecylpropane-1, | -0.66 | | No bioaccumulation expected | |
| 3-diamine | | | | |
| sodium xylene sulphonate | -3.12 | Method not given | No bioaccumulation expected | |
| sodium hydroxide | No data available | | Not relevant, does not | |
| | | | bioaccumulate | |

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|--|-------------------|------------------------|------------------|-----------------------------------|--------|
| tetrasodium ethylene diamine tetraacetate | 1.8 | Lepomis macrochirus | Method not given | Low potential for bioaccumulation | |
| I-(3-aminopropyl)-N-do lecylpropane-1,3-diami ne | | | | | |
| sodium xylene sulphonate | No data available | | | | |
| sodium hydroxide | 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 |
|--|--------------------------------------|---|--------|-----------------------|---|
| tetrasodium ethylene diamine tetraacetate | No data available | | | | Adsorption to solid soil phase is not expected |
| N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine | No data available | | | | |
| sodium xylene sulphonate | No data available | | | | |
| sodium hydroxide | No data available | | | | Mobile in soil |

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:

European Waste Catalogue:

Empty packaging Recommendation: Suitable cleaning agents:

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. 20 01 15* - alkalines.

Dispose of observing national or local regulations. 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: 1760 14.2 UN proper shipping name: Corrosive liquid, n.o.s. (N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine, sodium hydroxide) 14.3 Transport hazard class(es): Transport hazard class (and subsidiary risks): 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 and the IBC Code: The product is not transported in bulk tankers. Other relevant information: ADR Classification code: C7 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
- Regulation (EU) No 528/2012 on biocidal products

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

UFI: ECD3-T0G4-E004-A8FX

| Ingredients according to EC Detergents Regulation 648/2004 | |
|--|----------|
| EDTA and salts thereof | 5 - 15 % |
| NTA (nitrilotriacetic acid) and salts thereof | < 5 % |
| disinfectants | |

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

Revision: 2019-09-08

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 1, 2, 3, 4, 8, 9, 11, 15, 16

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.

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

- H290 May be corrosive to metals.
 H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H373 May cause damage to organs through prolonged or repeated exposure.
- · H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

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 • LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 Lethal Concentration, 50% / Median Lethal Concentration
 EC50 effective concentration, 50%
 NOEL No observed effect level

- NOAEL No observed adverse effect level
- · OECD Organization for Economic Cooperation and Development

End of Safety Data Sheet