

Safety Data Sheet According to Regulation (EC) No 1907/2006

Clax Profi Forte 36C1

Revision: 2014-10-03 Version: 03.0

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

1.1 Product identifier

Trade name: Clax Profi Forte 36C1

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

Identified uses:

For professional and industrial use only.

AISE-P101 - Laundry detergent. Automatic 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 Regulation (EC) No 1272/2008.

Skin Corr. 1B (H314) Met. Corr. 1 (H290)

Classification in accordance with Directive 1999/45/EC and corresponding national legislation Indication of danger

C - Corrosive

Risk phrases:

R34 - Causes burns.

2.2 Label elements



Signal word: Danger

Contains disodium/dipotassium metasilicate (Sodium/Potassium Metasilicate).

Hazard statements:

H314 - Causes severe skin burns and eye damage.

H290 - May be corrosive to metals.



Precautionary statements:

P280 - Wear protective gloves, protective clothing and eye or face protection.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTRE, doctor or physician.

2.3 Other hazards

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Ingredient(s) | EC number | CAS number | REACH number | Classification | Classification (1999/45/EC) | Notes | Weight percent |
|---|------------------------|------------|------------------|---|--------------------------------|-------|----------------|
| alkyl alcohol ethoxylate | Polymer* | 68439-46-3 | [4] | Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412) | Xn;R22 Xi;R41 | | 10-20 |
| disodium/dipotassium metasilicate | 215-687-4 215-199-1 | - | [1] | Skin Corr. 1B (H314) STOT SE 3 (H335) Met. Corr. 1 (H290) | C;R34 Xi;R37 | | 3-10 |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | 287-337-9 | 85480-57-5 | [1] | Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) | Xn;R22 Xi;R38-41 | | 3-10 |
| potassium hydroxide | 215-181-3 | 1310-58-3 | 01-2119487136-33 | Skin Corr. 1A (H314) Acute Tox. 4 (H302) Met. Corr. 1 (H290) | Xn;R22 C;R35 | | 0.1-1 |
| sodium hydroxide | 215-185-5 | 1310-73-2 | 01-2119457892-27 | Skin Corr. 1A (H314) Met. Corr. 1 (H290) | C;R35 | | 0.1-1 |

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

Inhalation Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off

immediately all contaminated clothing and wash it before re-use. Immediately call a POISON

CENTRE, doctor or physician.

Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, Eye contact:

if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or

physician.

Rinse mouth. Immediately drink 1 glass of water. Do NOT induce vomiting. Keep at rest. Ingestion:

Immediately call a POISON CENTRE, doctor or physician.

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

4.2 Most important symptoms and effects, both acute and delayed

No known effects or symptoms in normal use. Inhalation:

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

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

oesophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

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 Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original container. Store in a closed container.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Workplace exposure limits

Air limit values, if available:

| Ingredient(s) | EU - Long term value(s) | EU - Short term value(s) | UK - Long term value(s) | UK - Short term value(s) |
|---------------------|----------------------------|-----------------------------|----------------------------|--------------------------|
| potassium hydroxide | | | | 2 mg/m ³ |
| 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 |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| alkyl alcohol ethoxylate | No data available | No data available | No data available | No data available |
| disodium/dipotassium metasilicate | No data available | No data available | No data available | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | 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 |
| sodium hydroxide | 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) |
|---|----------------------------|--|---------------------------|---|
| alkyl alcohol ethoxylate | No data available | No data available | No data available | No data available |
| disodium/dipotassium metasilicate | No data available | No data available | No data available | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | 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 |

| sodium hydroxide | 2 % | 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) |
|---|----------------------------|--|---------------------------|---|
| alkyl alcohol ethoxylate | No data available | No data available | No data available | No data available |
| disodium/dipotassium metasilicate | No data available | No data available | No data available | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | 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 |
| sodium hydroxide | 2 % | 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 |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| alkyl alcohol ethoxylate | No data available | No data available | No data available | No data available |
| disodium/dipotassium metasilicate | No data available | No data available | No data available | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | No data available | No data available | No data available |
| potassium hydroxide | No data available | No data available | 1 | No data available |
| sodium hydroxide | No data available | No data available | 1 | 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 |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| alkyl alcohol ethoxylate | No data available | No data available | No data available | No data available |
| disodium/dipotassium metasilicate | No data available | No data available | No data available | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | No data available | No data available | No data available |
| potassium hydroxide | No data available | No data available | 1 | No data available |
| sodium hydroxide | No data available | No data available | 1 | 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) |
|---|-----------------------------|------------------------------|---------------------|-------------------------------|
| alkyl alcohol ethoxylate | No data available | No data available | No data available | No data available |
| disodium/dipotassium metasilicate | No data available | No data available | No data available | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | 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 |
| sodium hydroxide | No data available | No data available | No data available | No data available |

Environmental exposure - PNEC, continued

| Ingredient(s) | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m³) |
|---|------------------------------|-----------------------------|-------------------|-------------------|
| alkyl alcohol ethoxylate | No data available | No data available | No data available | No data available |
| disodium/dipotassium metasilicate | No data available | No data available | No data available | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | 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 |
| sodium hydroxide | No data available | No data available | No data available | No data available |

8.2 Exposure controls

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

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:

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

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

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is

strongly recommended when handling open containers or if splashes may occur.

Hand protection: Chemical-resistant protective gloves (EN 374).

Verify instructions regarding permeability and breakthrough time, as provided by the gloves

supplier

Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact:

Material: butyl rubber
Penetration time: >= 480 min
Material thickness: >= 0.7 mm

Suggested gloves for protection against splashes:

Material: nitrile rubber Penetration time: >= 30 min Material thickness: >= 0.4 mm

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

be chosen.

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may

occur.

Respiratory protection: No special requirements under normal use conditions.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical State: Liquid

Colour: Opaque, Pale, Yellow Odour: Slightly perfumed Odour threshold: Not applicable

pH: > 12 (neat)

Melting point/freezing point (°C): Not determined

Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|---|-------------------|------------------|----------------------------|
| alkyl alcohol ethoxylate | > 232.2 | Method not given | |
| disodium/dipotassium metasilicate | No data available | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | |
| potassium hydroxide | 140 | Method not given | |
| sodium hydroxide | > 990 | Method not given | |

Method / remark

Flash point (°C): Not applicable.

Sustained combustion: Not determined Evaporation rate: Not determined Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

| Ingredient(s) | Value (Pa) | Method | Temperature (°C) |
|---|-------------------|------------------|---------------------|
| alkyl alcohol ethoxylate | < 10 | Method not given | 37.8 |
| disodium/dipotassium metasilicate | No data available | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | |
| potassium hydroxide | 2300 | Method not given | 20 |
| sodium hydroxide | < 1330 | Method not given | 20 |

Method / remark

Vapour density: Not determined Relative density: 1.18 g/cm³ (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|---|-------------------|------------------|---------------------|
| alkyl alcohol ethoxylate | 100 Soluble | Method not given | |
| disodium/dipotassium metasilicate | No data available | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | |
| potassium hydroxide | No data available | | |
| sodium hydroxide | 1000 | Method not given | 20 |

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

Method / remark

Autoignition temperature: Not determined Decomposition temperature: Not determined

Viscosity: ≈ 525 mPa.s (20 °C) Explosive properties: Not explosive. Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals: Corrosive

Weight of evidence

Substance data, dissociation constant, if available:

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

Reacts with acids.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

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) |
|---|----------|-------------------|---------|------------------|-------------------|
| alkyl alcohol ethoxylate | LD 50 | 300 - 2000 | | Method not given | |
| disodium/dipotassium metasilicate | | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | |
| potassium hydroxide | LD 50 | 333 | Rat | OECD 425 | |
| sodium hydroxide | | No data available | | | |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|-----------------------------------|----------|----------------------|---------|------------------|-------------------|
| alkyl alcohol ethoxylate | LD 50 | 2000 - 5000 | Rat | Method not given | |
| disodium/dipotassium metasilicate | | No data available | | | |

| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available |
|---|----------------------|
| potassium hydroxide | No data available |
| sodium hydroxide | No data available |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|----------|----------------------|---------|--------|-------------------|
| alkyl alcohol ethoxylate | | No data available | | | |
| disodium/dipotassium metasilicate | | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | |
| potassium hydroxide | | No data available | | | |
| sodium hydroxide | | No data available | | | |

Irritation and corrosivity Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|------------------|---------------|
| alkyl alcohol ethoxylate | Not irritant | | Method not given | |
| disodium/dipotassium metasilicate | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | | |
| potassium hydroxide | Corrosive | Rabbit | Draize test | |
| sodium hydroxide | Corrosive | Rabbit | Method not given | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|------------------|---------------|
| alkyl alcohol ethoxylate | Severe damage | Rabbit | Method not given | |
| disodium/dipotassium metasilicate | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | | |
| potassium hydroxide | Corrosive | | Method not given | |
| sodium hydroxide | Corrosive | Rabbit | Method not given | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| alkyl alcohol ethoxylate | No data available | | | |
| disodium/dipotassium metasilicate | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | | |
| potassium hydroxide | No data available | | | |
| sodium hydroxide | No data available | | | |

Sensitisation

Sensitisation by skin contact

| Ochsitisation by skin contact | | | | |
|---|-------------------|------------|---------------------------|-------------------|
| Ingredient(s) | Result | Species | Method | Exposure time (h) |
| alkyl alcohol ethoxylate | Not sensitising | Guinea pig | Method not given | |
| disodium/dipotassium metasilicate | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | | |
| potassium hydroxide | Not sensitising | Guinea pig | Method not given | |
| sodium hydroxide | Not sensitising | | Human repeated patch test | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| alkyl alcohol ethoxylate | No data available | | | |
| disodium/dipotassium metasilicate | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | | |
| potassium hydroxide | No data available | | | |
| sodium hydroxide | No data available | | | |

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) $\underline{\text{Mutagenicity}}$

| Ingredient(s) | Result (in-vitro) | Method (in-vitro) | Result (in-vivo) | Method (in-vivo) |
|-----------------------------------|---|----------------------|-------------------|---------------------|
| alkyl alcohol ethoxylate | No evidence for mutagenicity, negative test results | OECD 473 | No data available | |
| disodium/dipotassium metasilicate | No data available | | No data available | |

| benzenesulphonic acid, mono-C10-13-alkyl | No data available | | No data available | |
|--|--|-----------------|--|---------------|
| derivs., potassium salts | | | | |
| potassium hydroxide | No evidence for mutagenicity, negative | Method not | No data available | |
| | test results | given | | |
| sodium hydroxide | No evidence for mutagenicity, negative | DNA repair test | No evidence for mutagenicity, negative | OECD 474 (EU |
| | test results | on rat | test results | B.12) OECD |
| | | hepatocytes | | 475 (EU B.11) |
| | | OECD 473 | | |

Carcinogenicity

| Ingredient(s) | Effect |
|---|--|
| alkyl alcohol ethoxylate | No evidence for carcinogenicity, negative test results |
| disodium/dipotassium metasilicate | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available |
| potassium hydroxide | No evidence for carcinogenicity, negative test results |
| sodium hydroxide | No evidence for carcinogenicity, weight-of-evidence |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|---|----------|-----------------|-----------------------|---------|-----------|---------------|--|
| alkyl alcohol ethoxylate | NOAEL | | > 250 | Rat | Not known | | No effects on fertility No developmental toxicity |
| disodium/dipotassium metasilicate | | | No data available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | | No data available | | | | |
| potassium hydroxide | | | No data available | | | | No evidence for reproductive toxicity |
| sodium hydroxide | | | No data available | | | | No evidence for developmental toxicity No evidence for reproductive toxicity |

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 |
|---|----------|-----------------------|---------|------------|----------------------|--------------------------------------|
| | | | | | unie (uays) | anecteu |
| alkyl alcohol ethoxylate | NOAEL | 80 - 400 | | Method not | | |
| | | | | given | | |
| disodium/dipotassium metasilicate | | No data | | | | |
| · | | available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., | | No data | | | | |
| potassium salts | | available | | | | |
| potassium hydroxide | | No data | | | | |
| | | available | | | | |
| sodium hydroxide | | 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 |
|---|----------|-----------------------|---------|-----------------------|----------------------|---|
| alkyl alcohol ethoxylate | NOAEL | 80 | | OECD 411 (EU B.28) | 90 | |
| disodium/dipotassium metasilicate | | No data available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | | |
| potassium hydroxide | | No data available | | | | |
| 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 |
|---|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| alkyl alcohol ethoxylate | | No data available | | | | |
| disodium/dipotassium metasilicate | | No data available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | | |
| potassium hydroxide | | 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 |
|--------------------------|----------------|----------|-----------------------|---------|--------|---------------|---|--------|
| alkyl alcohol ethoxylate | | | No data available | | | | | |

| disodium/dipotassium | | N | lo data | · | · | | |
|--------------------------|---|----|----------|---|---|--|--|
| metasilicate | | av | vailable | | | | |
| benzenesulphonic acid | , | N | lo data | | | | |
| mono-C10-13-alkyl | | av | vailable | | | | |
| derivs., potassium salts | S | | | | | | |
| potassium hydroxide | | N | lo data | | | | |
| | | av | vailable | | | | |
| sodium hydroxide | | N | lo data | · | · | | |
| - | | av | vailable | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|---|-------------------|
| alkyl alcohol ethoxylate | No data available |
| disodium/dipotassium metasilicate | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available |
| potassium hydroxide | No data available |
| sodium hydroxide | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|---|-------------------|
| alkyl alcohol ethoxylate | No data available |
| disodium/dipotassium metasilicate | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available |
| potassium hydroxide | 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.

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) |
|---|----------|----------------------|--------------------|-------------------------------|-------------------|
| alkyl alcohol ethoxylate | LC 50 | 5 - 7 | Fish | 92/69/EEC, C1, semi-static | 96 |
| disodium/dipotassium metasilicate | | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | |
| potassium hydroxide | LC 50 | 80 | Various species | Method not given | 24 |
| 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) |
|---|----------|----------------------|-------------------------|------------------|-------------------|
| alkyl alcohol ethoxylate | EC 50 | 5.3 | Daphnia | 92/69/EEC | 48 |
| disodium/dipotassium metasilicate | | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | |
| potassium hydroxide | EC 50 | 30 - 1000 | Daphnia magna Straus | Method not given | |
| 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 | Exposure time (h) |
|---|----------|----------------------|---------------|-----------|-------------------|
| alkyl alcohol ethoxylate | EC 50 | 1.4 - 47 | Not specified | 92/69/EEC | 72 |
| disodium/dipotassium metasilicate | | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | |

| potassium hydroxide | | No data available | | | |
|---------------------|-------|----------------------|---------------|------------------|------|
| sodium hydroxide | EC 50 | 22 | Photobacteriu | Method not given | 0.25 |
| | | | m | | |
| | | | phosphoreum | | ı |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---|----------|----------------------|---------|--------|----------------------|
| alkyl alcohol ethoxylate | | No data available | | | |
| disodium/dipotassium metasilicate | | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | |
| potassium hydroxide | | No data available | | | |
| sodium hydroxide | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---|----------|----------------------|----------|------------------|---------------|
| alkyl alcohol ethoxylate | EC 50 | > 140 | Bacteria | Method not given | 3 hour(s) |
| disodium/dipotassium metasilicate | | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | |
| potassium hydroxide | | No data available | | | |
| 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 |
|---|----------|----------------------|---------------|------------------|---------------|------------------|
| alkyl alcohol ethoxylate | EC 10 | 8.983 | Not specified | Method not given | 21 day(s) | |
| disodium/dipotassium metasilicate | | No data available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | | |
| potassium hydroxide | | 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 |
|--|----------|----------------------|-------------|------------------|---------------|------------------|
| alkyl alcohol ethoxylate | EC 10 | 2.579 | Daphnia sp. | Method not given | 21 day(s) | |
| disodium/dipotassium metasilicate | | No data available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | | |
| potassium hydroxide | | 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 |
|--|----------|---------------------------------|---------|--------|----------------------|------------------|
| alkyl alcohol ethoxylate | | No data available | | | | |
| disodium/dipotassium metasilicate | | No data available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | No data available | | | | |
| potassium hydroxide | | No data available | | | | |
| sodium hydroxide | | No data 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

photodegradation in air if available:

| Ingredient(s) | , | | 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 |
|---|----------|-------------------|-------------------|------------------|--------------------------------------|
| alkyl alcohol ethoxylate | | | 60 % in 28 day(s) | Method not given | Readily biodegradable |
| disodium/dipotassium metasilicate | | | | | No data available |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | | | | No data available |
| potassium hydroxide | | | | | Not applicable (inorganic substance) |
| sodium hydroxide | | | | | Not applicable (inorganic substance) |

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

| Ingredient(s) | Value | Method | Evaluation | Remark |
|---|-------------------|------------------|--------------------------------------|--------|
| alkyl alcohol ethoxylate | 3.11 - 4.19 | Method not given | High potential for bioaccumulation | |
| disodium/dipotassium metasilicate | No data available | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | | |
| potassium hydroxide | No data available | | Not relevant, does not bioaccumulate | |
| sodium hydroxide | No data available | _ | Not relevant, does not bioaccumulate | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|-------------------|---------|------------------|------------------------------------|--------|
| alkyl alcohol ethoxylate | < 500 | | Method not given | High potential for bioaccumulation | |
| disodium/dipotassium metasilicate | No data available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | | | | | |
| potassium hydroxide | No data available | | | | |
| sodium hydroxide | No data available | | | | |

12.4 Mobility in soil

| Ingredient(s) | Adsorption coefficient Log Koc | Desorption coefficient Log Koc(des) | Method | Soil/sediment type | Evaluation |
|--|--------------------------------------|---|--------|-----------------------|--|
| alkyl alcohol ethoxylate | No data available | | | | Potential for mobility in soil, soluble in water |
| disodium/dipotassium metasilicate | No data available | | | | |
| benzenesulphonic acid, mono-C10-13-alkyl derivs., potassium salts | No data available | | | | |
| potassium hydroxide | No data available | | | | Low potential for adsorption to soil |
| 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

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 products:

material is suitable for energy recovery or recycling in line with local legislation.

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

Empty packaging

Dispose of observing national or local regulations. Recommendation:

Suitable cleaning agents: 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. (disodium-/dipotassium trioxosilicate, sodium-/potassium hydroxide)

14.3 Transport hazard class(es):

Class: 8 Label(s): 8

14.4 Packing group: III 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: 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

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

Ingredients according to EC Detergents Regulation 648/2004

15 - 30% anionic surfactants, non-ionic surfactants 5 - 15% < 5% phosphonates

optical brighteners, perfumes, Limonene, Benzyl Salicylate, Linalool

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: MS1000888 Version: 03.0 Revision: 2014-10-03

Reason for revision:

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 2, 8

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 R, H and EUH phrases mentioned in section 3:

- H290 May be corrosive to metals
 H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- · H335 May cause respiratory irritation.
- H412 Harmful to aquatic life with long lasting effects.
- R22 Harmful if swallowed.
- R34 Causes burns.R35 Causes severe burns.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.

Abbreviations and acronyms:

- · AISE The international Association for Soaps, Detergents and Maintenance Products
- DNEL Derived No Effect Limit

- EUH CLP Specific hazard statement
 PBT Persistent, Bioaccumulative and Toxic
 PNEC Predicted No Effect Concentration
- REACH number REACH registration number, without supplier specific part
- · vPvB very Persistent and very Bioaccumulative
- ATE Acute Toxicity Estimate

End of Safety Data Sheet