

Suma Star Plus D1-PLUS

Revision: 2017-03-20

Version: 10.1

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

1.1 Product identifier

Trade name: Suma Star Plus D1-PLUS

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

Identified uses:

For professional use only.

AISE-P201 - Dishwash product. Manual process

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

1.3 Details of the supplier of the safety data sheet

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@sealedair.com

1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute Tox. 4 (H302)

Skin Irrit. 2 (H315)

Eye Dam. 1 (H318)

Aquatic Chronic 3 (H412)

2.2 Label elements



Signal word: Danger.

Contains benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine (MIPA-Dodecylbenzenesulfonate), Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt (MIPA Laureth Sulfate).

Hazard statements:

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

P280 - Wear eye or face protection.

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

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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

The product contains no substances classified as hazardous in concentrations which should be taken into account.

| Ingredient(s) | EC number | CAS number | REACH number | Classification | Notes | Weight percent |
|---|-----------|--------------|-------------------|--|-------|----------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | 289-091-8 | 85995-83-1 | No data available | Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412) | | 30-50 |
| propane-1,2-diol | 200-338-0 | 57-55-6 | 01-2119456809-23 | Not classified | | 10-20 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | 932-185-7 | 1187742-72-8 | 01-2119976350-37 | Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412) | | 10-20 |
| alkyl polyglucoside | 600-975-8 | 110615-47-9 | 01-2119489418-23 | Skin Irrit. 2 (H315) Eye Dam. 1 (H318) | | 3-10 |
| - | - | - | - | Not classified | | < 0.01 |

* Polymer.

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:

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident.

Inhalation:

Get medical attention or advice if you feel unwell.

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation or rash occurs: Get medical advice or attention.

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. Call a POISON CENTRE, doctor or physician.

Self-protection of first aider:

Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:

No known effects or symptoms in normal use.

Skin contact:

Causes irritation.

Eye contact:

Causes severe or permanent damage.

Ingestion:

No known effects or symptoms in normal use.

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 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

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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 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 advised 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 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) | UK - Long term value(s) | UK - Short term value(s) |
|------------------|---|---|
| propane-1,2-diol | 150 ppm total particulates and vapour 474 mg/m ³ total particulates and vapour 10 mg/m ³ particulates | 450 ppm total particulate and vapour 1422 mg/m ³ total particulate and vapour 30 mg/m ³ particulate |

Biological limit values, 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 |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | No data available | No data available | No data available |
| propane-1,2-diol | - | - | - | - |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | No data available | No data available | No data available |
| alkyl polyglucoside | - | - | - | 35.7 |
| - | 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) |
|---|----------------------------|--|---------------------------|---|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | No data available | No data available | No data available |
| propane-1,2-diol | No data available | - | No data available | - |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | No data available | No data available | No data available |
| alkyl polyglucoside | No data available | - | No data available | 595000 |
| - | No data available | No data available | No data available | No data available |

DNEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local | Short term - Systemic | Long term - Local | Long term - Systemic |
|---------------|--------------------|-----------------------|-------------------|----------------------|
|---------------|--------------------|-----------------------|-------------------|----------------------|

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| | effects | effects (mg/kg bw) | effects | effects (mg/kg bw) |
|---|-------------------|--------------------|-------------------|--------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | No data available | No data available | No data available |
| propane-1,2-diol | No data available | - | No data available | - |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | No data available | No data available | No data available |
| alkyl polyglucoside | No data available | - | No data available | 357000 |
| - | 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 |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | No data available | No data available | No data available |
| propane-1,2-diol | - | - | 10 | 168 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | No data available | No data available | No data available |
| alkyl polyglucoside | - | - | - | 420 |
| - | 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 |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | No data available | No data available | No data available |
| propane-1,2-diol | - | - | 10 | 50 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | No data available | No data available | No data available |
| alkyl polyglucoside | - | - | - | 124 |
| - | 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) |
|---|-----------------------------|------------------------------|---------------------|-------------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | No data available | No data available | No data available |
| propane-1,2-diol | 260 | 26 | 183 | 20000 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | No data available | No data available | No data available |
| alkyl polyglucoside | 0.176 | 0.018 | 0.0295 | 5000 |
| - | 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) |
|---|------------------------------|--------------------------|-------------------|--------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | No data available | No data available | No data available |
| propane-1,2-diol | 572 | 57.2 | 50 | - |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | No data available | No data available | No data available |
| alkyl polyglucoside | 1.516 | 0.065 | 0.654 | - |
| - | No data available | No data available | No data available | No data available |

8.2 Exposure controls

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

Recommended safety measures for handling the undiluted product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls:

If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls:

Avoid direct contact and/or splashes where possible Train personnel

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

Safety glasses or goggles (EN 166).

Hand protection:

Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: >= 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

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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.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 0.08

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

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

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.

Hand protection: Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

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

| | |
|---|---|
| <p>Physical State: Liquid</p> <p>Colour: Clear, Yellow</p> <p>Odour: Slightly perfumed</p> <p>Odour threshold: Not applicable</p> <p>pH: ≈ 8 (neat)</p> <p>Melting point/freezing point (°C): Not determined</p> <p>Initial boiling point and boiling range (°C): Not determined</p> | <p>Method / remark</p> <p>ISO 4316</p> <p>Not relevant to classification of this product</p> <p>See substance data</p> |
|---|---|

Substance data, boiling point

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|---|-------------------|------------------|----------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | | |
| propane-1,2-diol | 185-190 | Method not given | 1013 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | |
| alkyl polyglucoside | > 100 | Method not given | 1013 |
| - | No data available | | |

| | |
|--|---|
| <p>Flash point (°C): Not applicable.</p> <p>Sustained combustion: Not applicable.</p> <p>Evaporation rate: Not determined</p> <p>Flammability (solid, gas): Not applicable to liquids</p> <p>Upper/lower flammability limit (%): Not determined</p> | <p>Method / remark</p> <p>Not relevant to classification of this product</p> <p>See substance data</p> |
|--|---|

Substance data, flammability or explosive limits, if available:

| Ingredient(s) | Lower limit (% vol) | Upper limit (% vol) |
|------------------|---------------------|---------------------|
| propane-1,2-diol | 2.6 | 12.6 |

| | |
|---|---|
| <p>Vapour pressure: Not determined</p> | <p>Method / remark</p> <p>See substance data</p> |
|---|---|

Substance data, vapour pressure

| Ingredient(s) | Value (Pa) | Method | Temperature (°C) |
|---|-------------------|------------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | | |
| propane-1,2-diol | 18.6 | Method not given | 20 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | |
| alkyl polyglucoside | < 0.0077 | Method not given | 20 |
| - | No data available | | |

Method / remark

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Vapour density: Not determined
Relative density: ≈ 1.05 (20 °C)
Solubility in / Miscibility with Water: Fully miscible

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

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|---|-------------------|------------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | | |
| propane-1,2-diol | Soluble | Method not given | |
| Alcohols, C12-14 (even numbered), ethoxylated (≤ 2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | |
| alkyl polyglucoside | No data available | | |
| - | No data available | | |

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

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Viscosity: ≈ 270 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: Not corrosive

Not relevant to classification of this product
 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

None known under normal use conditions.

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): 1500

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) |
|---|------------------|-------------------|---------|-------------------|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | LD ₅₀ | 300 - 2000 | Rat | Read across | |
| propane-1,2-diol | LD ₅₀ | > 10000 | Rat | Method not given | |
| Alcohols, C12-14 (even numbered), ethoxylated (≤ 2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | |
| alkyl polyglucoside | LD ₅₀ | > 2000 | | OECD 401 (EU B.1) | |
| - | | No data available | | | |

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Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|---|------------------|-------------------|---------|-------------------|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | |
| propane-1,2-diol | LD ₅₀ | > 2000 | Rabbit | Method not given | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | |
| alkyl polyglucoside | LD ₅₀ | > 2000 | Rabbit | OECD 402 (EU B.3) | |
| - | | No data available | | | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|------------------|------------------------------------|---------|--------------------|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | |
| propane-1,2-diol | LC ₅₀ | > 317 (mist) No mortality observed | Rabbit | Non guideline test | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | |
| alkyl polyglucoside | | No data available | | | |
| - | | No data available | | | |

Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|-------------------|---------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | Irritant | Rabbit | OECD 404 (EU B.4) | |
| propane-1,2-diol | Not irritant | Rabbit | OECD 404 (EU B.4) | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | | |
| alkyl polyglucoside | Irritant | | OECD 404 (EU B.4) | |
| - | No data available | | | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|---------------------------|---------|-------------------|---------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | Severe damage | Rabbit | Method not given | |
| propane-1,2-diol | Not corrosive or irritant | Rabbit | OECD 405 (EU B.5) | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | | |
| alkyl polyglucoside | Severe damage | | OECD 405 (EU B.5) | |
| - | No data available | | | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | | | |
| propane-1,2-diol | No data available | | | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | | |
| alkyl polyglucoside | No data available | | | |
| - | No data available | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|---|-------------------|------------|--------------------------|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| propane-1,2-diol | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | | |
| alkyl polyglucoside | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| - | No data available | | | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | | | |
| propane-1,2-diol | No data available | | | |

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| | | | | |
|---|-------------------|--|--|--|
| | | | | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | | |
| alkyl polyglucoside | No data available | | | |
| - | 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) |
|---|---|--------------------------------|---|--------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) | No data available | |
| propane-1,2-diol | No evidence for mutagenicity, negative test results | Method not given | No data available | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | No data available | |
| alkyl polyglucoside | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) OECD 473 | No evidence for mutagenicity, negative test results | OECD 474 (EU B.12) |
| - | No data available | | No data available | |

Carcinogenicity

| Ingredient(s) | Effect |
|---|--|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available |
| propane-1,2-diol | No evidence for carcinogenicity, negative test results |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available |
| alkyl polyglucoside | No evidence for carcinogenicity, weight-of-evidence |
| - | 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 |
|---|----------|--|--------------------|---------|---|---------------|---------------------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | | No data available | | | | |
| propane-1,2-diol | | | No data available | | | | No evidence for reproductive toxicity |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | | No data available | | | | |
| alkyl polyglucoside | NOAEL | Developmental toxicity Maternal toxicity | 1000 | Rat | OECD 414 (EU B.31), oral OECD 421, oral | | No evidence for reproductive toxicity |
| - | | | 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 |
|---|----------|--------------------|---------|--------------------|----------------------|--------------------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | | |
| propane-1,2-diol | | No data available | | | | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | | |
| alkyl polyglucoside | NOAEL | 100 | Rat | OECD 408 (EU B.26) | | |
| - | | 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 |
|---|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | | |
| propane-1,2-diol | | No data available | | | | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | | |
| alkyl polyglucoside | | No data available | | | | |

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| | | | | | | |
|---|--|-------------------|--|--|--|--|
| - | | 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 |
|---|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | | |
| propane-1,2-diol | | No data available | | | | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | | |
| alkyl polyglucoside | | No data available | | | | |
| - | | 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 |
|---|----------------|----------|--------------------|---------|--------|---------------|--------------------------------------|--------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | | No data available | | | | | |
| propane-1,2-diol | | | No data available | | | | | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | | No data available | | | | | |
| alkyl polyglucoside | | | No data available | | | | | |
| - | | | No data available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|---|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available |
| propane-1,2-diol | No data available |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available |
| alkyl polyglucoside | No data available |
| - | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|---|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available |
| propane-1,2-diol | No data available |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available |
| alkyl polyglucoside | No data available |
| - | 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) |
|--|------------------|--------------|------------------------|------------------------|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | LC ₅₀ | > 1 - 10 | <i>Cyprinus carpio</i> | OECD 203, flow-through | 96 |

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| | | | | | |
|---|------------------|-------------------|------|------------------|----|
| propane-1,2-diol | LC ₅₀ | > 1000 | Fish | Method not given | 24 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | |
| alkyl polyglucoside | LC ₅₀ | 1 - 10 | Fish | ISO 7346 | - |
| - | | No data available | | | |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|------------------|-------------------|-----------------------------|------------------|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | EC ₅₀ | > 1 - 10 | <i>Daphnia magna Straus</i> | OECD 202, static | 48 |
| propane-1,2-diol | EC ₅₀ | > 100 | <i>Daphnia</i> | Method not given | 48 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | |
| alkyl polyglucoside | EC ₅₀ | 7 | <i>Daphnia magna Straus</i> | Method not given | 48 |
| - | | No data available | | | |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|------------------|-------------------|--------------------------------|----------------------------|-------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | EC ₅₀ | > 10 - 100 | <i>Desmodesmus subspicatus</i> | OECD 201, static | 72 |
| propane-1,2-diol | EC ₅₀ | 24200 | <i>Desmodesmus subspicatus</i> | OECD 201 (EU C.3) | 72 |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | |
| alkyl polyglucoside | EC ₅₀ | 10 - 100 | Not specified | 88/302/EEC, Part C, static | - |
| - | | No data available | | | |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---|----------|-------------------|---------|--------|----------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | - |
| propane-1,2-diol | | No data available | | | - |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | |
| alkyl polyglucoside | | No data available | | | - |
| - | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---|-----------------|-------------------|---------------------------|------------------|---------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | |
| propane-1,2-diol | EC ₀ | > 20000 | <i>Pseudomonas putida</i> | Method not given | 18 hour(s) |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | |
| alkyl polyglucoside | EC ₀ | > 100 | Bacteria | OECD 209 | |
| - | | No data available | | | |

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---|----------|-------------------|---------------|----------|---------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | | |
| propane-1,2-diol | | No data available | | | | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | | |
| alkyl polyglucoside | NOEC | 1 - 10 | Not specified | OECD 204 | 14 day(s) | |
| - | | No data available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|-------------------|---------|--------|---------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | | |

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| | | | | | | |
|---|------|-------------------|---------------------------|------------------|----------|--|
| propane-1,2-diol | NOEC | 13020 | <i>Ceriodaphnia dubia</i> | Method not given | 7 day(s) | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | | |
| alkyl polyglucoside | NOEC | 1 - 10 | <i>Daphnia sp.</i> | OECD 202 | | |
| - | | 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 |
|---|----------|---------------------------|---------|--------|----------------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | - | |
| propane-1,2-diol | | No data available | | | - | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | No data available | | | | |
| alkyl polyglucoside | | No data available | | | - | |
| - | | 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 |
|--|----------|-----------------------|---------|--------|----------------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | - | |
| propane-1,2-diol | | No data available | | | - | |
| alkyl polyglucoside | | No data available | | | - | |

Terrestrial toxicity - plants, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-----------------------|---------|--------|----------------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | - | |
| propane-1,2-diol | | No data available | | | - | |
| alkyl polyglucoside | | No data available | | | - | |

Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-------------------|---------|--------|----------------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | - | |
| propane-1,2-diol | | No data available | | | - | |
| alkyl polyglucoside | | No data available | | | - | |

Terrestrial toxicity - beneficial insects, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-----------------------|---------|--------|----------------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | - | |
| propane-1,2-diol | | No data available | | | - | |
| alkyl polyglucoside | | No data available | | | - | |

Terrestrial toxicity - soil bacteria, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|--|----------|-----------------------|---------|--------|----------------------|------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | | No data available | | | - | |
| propane-1,2-diol | | No data available | | | - | |
| alkyl polyglucoside | | No data available | | | - | |

12.2 Persistence and degradability**Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

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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 |
|---|--------------------------|-------------------|---------------------|------------------------|-----------------------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | Activated sludge, aerobe | Method not given | > 60 % in 28 day(s) | OECD 301A OECD 301B | Readily biodegradable |
| propane-1,2-diol | | | > 70 % in 28 day(s) | OECD 301A | Readily biodegradable |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | | | | | No data available |
| alkyl polyglucoside | | | 88% in 28 day(s) | OECD 301E | Readily biodegradable |
| - | | | | | No data available |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|---|-------------------|------------------|-----------------------------|--------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | | | |
| propane-1,2-diol | -1.07 | Method not given | No bioaccumulation expected | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | | |
| alkyl polyglucoside | =< 0.07 | Method not given | No bioaccumulation expected | |
| - | No data available | | | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|-------------------|---------|--------|------------|--------|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | | | | |
| propane-1,2-diol | No data available | | | | |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | | | |
| alkyl polyglucoside | No data available | | | | |
| - | 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 |
|---|--------------------------------|-------------------------------------|------------------|--------------------|--|
| benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine | No data available | | | | |
| propane-1,2-diol | No data available | | | | Potential for mobility in soil, soluble in water |
| Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt | No data available | | | | |
| alkyl polyglucoside | 1.7 | | Method not given | | |
| - | 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**

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| | |
|---|--|
| Waste from residues / unused products: | The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation. |
| European Waste Catalogue: | 20 01 29* - detergents containing dangerous substances. |
| Empty packaging Recommendation: | Dispose of observing national or local regulations. |
| Suitable cleaning agents: | Water, if necessary with cleaning agent. |

SECTION 14: Transport information**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

- 14.1 UN number: Non-dangerous goods
 14.2 UN proper shipping name: Non-dangerous goods
 14.3 Transport hazard class(es): Non-dangerous goods
 Class: -
 14.4 Packing group: Non-dangerous goods
 14.5 Environmental hazards: Non-dangerous goods
 14.6 Special precautions for user: Non-dangerous goods
 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.

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

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

Ingredients according to EC Detergents Regulation 648/2004

| | |
|-----------------------|--------|
| anionic surfactants | > 30 % |
| non-ionic surfactants | < 5 % |
| perfumes, Limonene | |

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.

15.2 Chemical safety assessment

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

SECTION 16: Other information

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

SDS code: MSDS3346

Version: 10.1

Revision: 2017-03-20

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, 3, 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:

- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H412 - Harmful 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

End of Safety Data Sheet