



## Bactosol Rinse Aid

Revision: 2022-12-01

Version: 05.1

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

#### 1.1 Product identifier

**Trade name:** Bactosol Rinse Aid

UFI: XY60-S0G6-E000-81P0

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

**Product use:** Dish washing rinse aid.  
For professional use only.

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

#### SWED - Sector-specific worker exposure description :

AISE\_SWED\_PW\_8b\_2  
AISE\_SWED\_PW\_4\_1

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

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands  
Tel: 01 8081808 (9am - 5pm Mon-Fri)  
Email: dublin.orders@diverse.com

#### 1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible).  
National Poisons Information Centre  
Tel: 01 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)  
Tel: 01 809 2566 (health care professionals).

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Eye Irrit. 2 (H319)

#### 2.2 Label elements



**Signal word:** Warning.

#### Hazard statements:

H319 - Causes serious eye irritation.

#### 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 |
|--------------------------|-----------|-------------|--------------|--|-------|----------------|
| alkyl alcohol alkoxylate | [4]       | 111905-53-4 | [4]          | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Aquatic Chronic 3 (H412) |       | 3-10           |

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|  |           |             |                  |  |      |
|--|-----------|-------------|------------------|--|------|
| citric acid  | 201-069-1 | -           | 01-2119457026-42 | STOT SE 3 (H335)<br>Eye Irrit. 2 (H319)                                    | 3-10 |
| sodium cumenesulphonate  | 239-854-6 | 15763-76-5  | 01-2119489411-37 | Eye Irrit. 2 (H319)  | 1-3  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | [4]       | 120313-48-6 | [4]              | Skin Irrit. 2 (H315)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 3 (H412) | 1-3  |

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

ATE, if available, are listed in section 11.

[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**

|  |   |
|--|---|
| <b>Inhalation:</b>                     | Get medical attention or advice if you feel unwell.   |
| <b>Skin contact:</b>                   | Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.  |
| <b>Eye contact:</b>                    | Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention. |
| <b>Ingestion:</b>                      | Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.   |
| <b>Self-protection of first aider:</b> | Consider personal protective equipment as indicated in subsection 8.2.  |

**4.2 Most important symptoms and effects, both acute and delayed**

|                      |   |
|----------------------|---|
| <b>Inhalation:</b>   | No known effects or symptoms in normal use. |
| <b>Skin contact:</b> | No known effects or symptoms in normal use. |
| <b>Eye contact:</b>  | Causes severe irritation.                   |
| <b>Ingestion:</b>    | 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**

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

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

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

**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.

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**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 Diversey. Wash hands before breaks and at the end of workday. Avoid contact with eyes. 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. 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:

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/DMEL 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 alkoxyolate                                      | No data available          | No data available             | No data available         | No data available            |
| citric acid  | -                          | -                             | -                         | -                            |
| sodium cumenesulphonate  | -                          | -                             | -                         | 3.8                          |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available          | No data available             | No data available         | No data available            |

DNEL/DMEL 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 alkoxyolate                                      | No data available          | No data available                        | No data available         | No data available                       |
| citric acid  | No data available          | -  | No data available         | -                                       |
| sodium cumenesulphonate  | -                          | -  | -                         | 136.25                                  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available          | No data available                        | No data available         | No data available                       |

DNEL/DMEL 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 alkoxyolate                                      | No data available          | No data available                        | No data available         | No data available                       |
| citric acid  | No data available          | -  | No data available         | -                                       |
| sodium cumenesulphonate  | -                          | -  | -                         | 68.1                                    |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available          | No data available                        | No data available         | No data available                       |

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

| Ingredient(s)  | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|--|----------------------------|-------------------------------|---------------------------|------------------------------|
| alkyl alcohol alkoxyolate                                      | No data available          | No data available             | No data available         | No data available            |
| citric acid  | -                          | -                             | -                         | -                            |
| sodium cumenesulphonate  | -                          | -                             | -                         | 26.9                         |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available          | No data available             | No data available         | No data available            |

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

| Ingredient(s)  | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|--|----------------------------|-------------------------------|---------------------------|------------------------------|
| alkyl alcohol alkoxyolate                                      | No data available          | No data available             | No data available         | No data available            |
| citric acid  | -                          | -                             | -                         | -                            |
| sodium cumenesulphonate  | -                          | -                             | -                         | 6.6                          |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available          | No data available             | No data available         | No data available            |

**Environmental exposure**

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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 alkoxylate                                       | No data available           | No data available            | No data available   | No data available             |
| citric acid  | 0.44                        | 0.044                        | -                   | > 1000                        |
| sodium cumenesulphonate  | 0.23                        | 0.023                        | 2.3                 | 100                           |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available           | No data available            | No data available   | No data available             |

Environmental exposure - PNEC, continued

| Ingredient(s)  | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg)      | Air (mg/m <sup>3</sup> ) |
|--|------------------------------|--------------------------|-------------------|--------------------------|
| alkyl alcohol alkoxylate                                       | No data available            | No data available        | No data available | No data available        |
| citric acid  | 34.6                         | 3.46                     | 33.1              | -                        |
| sodium cumenesulphonate  | 0.862                        | 0.0862                   | 0.037             | -                        |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | 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:

**Appropriate engineering controls:** No special requirements under normal use conditions.  
**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

## REACH use scenarios considered for the undiluted product:

|                                 | SWED - Sector-specific worker exposure description | LCS | PROC    | Duration (min) | ERC   |
|---------------------------------|--|-----|---------|----------------|-------|
| Automatic transfer and dilution | AISE_SWED_PW_8b_2                                  | PW  | PROC 8b | 60             | ERC8b |

## Personal protective equipment

**Eye / face protection:** Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 166).  
**Hand protection:** No special requirements under normal use conditions.  
**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 (% w/w):** 0.05

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

## REACH use scenarios considered for the diluted product:

|   | SWED             | LCS | PROC   | Duration (min) | ERC   |
|---|------------------|-----|--------|----------------|-------|
| Automatic application in a dedicated system | AISE_SWED_PW_4_1 | PW  | PROC 4 | 480            | ERC8a |

## Personal protective equipment

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

## Method / remark

**Physical state:** Liquid

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**Colour:** Clear , Red**Odour:** Product specific**Odour threshold:** Not applicable**Melting point/freezing point (°C):** Not determined**Initial boiling point and boiling range (°C):** Not determinedNot relevant to classification of this product  
See substance data

Substance data, boiling point

| Ingredient(s)  | Value (°C)        | Method           | Atmospheric pressure (hPa) |
|--|-------------------|------------------|----------------------------|
| alkyl alcohol alkoxyate  | No data available |                  |                            |
| citric acid  | No data available |                  |                            |
| sodium cumenesulphonate  | No data available |                  |                            |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | > 250             | Method not given |                            |

**Method / remark****Flammability (solid, gas):** Not applicable to liquids**Flammability (liquid):** Not flammable.**Flash point (°C):** Not applicable.**Sustained combustion:** Not applicable.*( UN Manual of Tests and Criteria, section 32, L.2 )***Lower and upper explosion limit/flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

**Method / remark****Autoignition temperature:** Not determined**Decomposition temperature:** Not applicable.**pH:** = < 2 (neat)**Dilution pH:** ≈ 4 (0.05 %)**Kinematic viscosity:** Not determined**Solubility in / Miscibility with water:** Fully miscible

ISO 4316

ISO 4316

Substance data, solubility in water

| Ingredient(s)  | Value (g/l)       | Method           | Temperature (°C) |
|--|-------------------|------------------|------------------|
| alkyl alcohol alkoxyate  | No data available |                  |                  |
| citric acid  | 1630              | Method not given |                  |
| sodium cumenesulphonate  | 493 Soluble       | Method not given | 20               |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | Insoluble         |                  |                  |

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

**Method / remark****Vapour pressure:** Not determined

See substance data

Substance data, vapour pressure

| Ingredient(s)  | Value (Pa)        | Method           | Temperature (°C) |
|--|-------------------|------------------|------------------|
| alkyl alcohol alkoxyate  | No data available |                  |                  |
| citric acid  | No data available |                  |                  |
| sodium cumenesulphonate  | No data available |                  |                  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | < 10              | Method not given | 20               |

**Method / remark****Relative density:** ≈ 1.04 (20 °C)**Relative vapour density:** No data available.**Particle characteristics:** No data available.

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

**9.2 Other information****9.2.1 Information with regard to physical hazard classes****Explosive properties:** Not explosive.**Oxidising properties:** Not oxidising.**Corrosion to metals:** Not corrosive**9.2.2 Other safety characteristics**

No other relevant information available.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

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**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**

Keep away from products containing chlorine-based bleaching agents or sulphites.

**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) | ATE (mg/kg)     |
|--|------------------|---------------|---------|------------------|-------------------|-----------------|
| alkyl alcohol alkoxyolate                                      | LD <sub>50</sub> | ≥ 300-2000    | Rat     | Method not given |                   | 14000           |
| citric acid  | LD <sub>50</sub> | 5400-11700    | Rat     | Method not given |                   | Not established |
| sodium cumenesulphonate  | LD <sub>50</sub> | > 7000        | Rat     | Method not given |                   | Not established |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | LD <sub>50</sub> | > 2000        | Rat     | Method not given |                   | 100000          |

## Acute dermal toxicity

| Ingredient(s)  | Endpoint         | Value (mg/kg)     | Species | Method           | Exposure time (h) | ATE (mg/kg)     |
|--|------------------|-------------------|---------|------------------|-------------------|-----------------|
| alkyl alcohol alkoxyolate                                      |                  | No data available |         |                  |                   | Not established |
| citric acid  | LD <sub>50</sub> | > 2000            | Rat     | Method not given |                   | Not established |
| sodium cumenesulphonate  | LD <sub>50</sub> | > 2000            | Rabbit  | Method not given |                   | Not established |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |                  | No data available |         |                  |                   | Not established |

## Acute inhalative toxicity

| Ingredient(s)  | Endpoint         | Value (mg/l)                     | Species | Method      | Exposure time (h) |
|--|------------------|----------------------------------|---------|-------------|-------------------|
| alkyl alcohol alkoxyolate                                      |                  | No data available                |         |             |                   |
| citric acid  |                  | No data available                |         |             |                   |
| sodium cumenesulphonate  | LC <sub>50</sub> | > 5 (mist) No mortality observed | Rat     | Read across | 3.87              |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |                  | No data available                |         |             |                   |

## Acute inhalative toxicity, continued

| Ingredient(s)  | ATE - inhalation, dust (mg/l) | ATE - inhalation, mist (mg/l) | ATE - inhalation, vapour (mg/l) | ATE - inhalation, gas (mg/l) |
|--|-------------------------------|-------------------------------|---------------------------------|------------------------------|
| alkyl alcohol alkoxyolate                                      | Not established               | Not established               | Not established                 | Not established              |
| citric acid  | Not established               | Not established               | Not established                 | Not established              |
| sodium cumenesulphonate  | Not established               | Not established               | Not established                 | Not established              |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | Not established               | Not established               | Not established                 | Not established              |

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**Irritation and corrosivity**

## Skin irritation and corrosivity

| Ingredient(s)  | Result        | Species | Method            | Exposure time |
|--|---------------|---------|-------------------|---------------|
| alkyl alcohol alkoxylate                                       | Mild irritant | Rabbit  | OECD 404 (EU B.4) |               |
| citric acid  | Not irritant  | Rabbit  | OECD 404 (EU B.4) |               |
| sodium cumenesulphonate  | Not irritant  | Rabbit  | OECD 404 (EU B.4) |               |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | Irritant      | Rabbit  | Draize test       |               |

## Eye irritation and corrosivity

| Ingredient(s)  | Result                    | Species | Method            | Exposure time |
|--|---------------------------|---------|-------------------|---------------|
| alkyl alcohol alkoxylate                                       | Irritant                  | Rabbit  | OECD 405 (EU B.5) |               |
| citric acid  | Irritant                  | Rabbit  | OECD 405 (EU B.5) |               |
| sodium cumenesulphonate  | Irritant                  | Rabbit  | OECD 405 (EU B.5) |               |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | Not corrosive or irritant | Rabbit  | Draize test       |               |

## Respiratory tract irritation and corrosivity

| Ingredient(s)  | Result            | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| alkyl alcohol alkoxylate                                       | No data available |         |        |               |
| citric acid  | No data available |         |        |               |
| sodium cumenesulphonate  | No data available |         |        |               |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available |         |        |               |

**Sensitisation**

## Sensitisation by skin contact

| Ingredient(s)  | Result            | Species    | Method                   | Exposure time (h) |
|--|-------------------|------------|--------------------------|-------------------|
| alkyl alcohol alkoxylate                                       | No data available |            |                          |                   |
| citric acid  | Not sensitising   | Guinea pig | Method not given         |                   |
| sodium cumenesulphonate  | Not sensitising   | Guinea pig | OECD 406 (EU B.6) / GPMT |                   |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available |            |                          |                   |

## Sensitisation by inhalation

| Ingredient(s)  | Result            | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| alkyl alcohol alkoxylate                                       | No data available |         |        |               |
| citric acid  | No data available |         |        |               |
| sodium cumenesulphonate  | No data available |         |        |               |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | 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)   |
|--|---|-------------------|---|--------------------|
| alkyl alcohol alkoxylate                                       | No data available                                   |                   | No data available                                   |                    |
| citric acid  | No data available                                   |                   | No evidence of genotoxicity, negative test results  | Method not given   |
| sodium cumenesulphonate  | No evidence for mutagenicity, negative test results | Method not given  | No evidence for mutagenicity, negative test results | OECD 474 (EU B.12) |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available                                   |                   | No data available                                   |                    |

## Carcinogenicity

| Ingredient(s)  | Effect   |
|--|--|
| alkyl alcohol alkoxylate                                       | No data available                                      |
| citric acid  | No evidence for carcinogenicity, negative test results |
| sodium cumenesulphonate  | No evidence for carcinogenicity, negative test results |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | 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               |
|---|----------|---------------------|--------------------|---------|--------------------|---------------|--|
| alkyl alcohol alkoxylate                          |          |                     | No data available  |         |                    |               |  |
| citric acid                                       |          |                     | No data available  |         |                    |               | No evidence for reproductive toxicity            |
| sodium cumenesulphonate                           | NOAEL    | Teratogenic effects | > 936              | Rat     | Non guideline test |               | No known significant effects or critical hazards |
| Alcohols, C12-15-branched and linear, ethoxylated |          |                     | No data available  |         |                    |               |  |

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|              |  |  |  |  |  |  |  |
|--------------|--|--|--|--|--|--|--|
| propoxylated |  |  |  |  |  |  |  |
|--------------|--|--|--|--|--|--|--|

**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 |
|--|----------|--------------------|---------|--------------------|----------------------|--------------------------------------|
| alkyl alcohol alkoxylate                                       |          | No data available  |         |                    |                      |                                      |
| citric acid  |          | No data available  |         |                    |                      |                                      |
| sodium cumenesulphonate  | NOAEL    | 763 - 3534         | Rat     | OECD 408 (EU B.26) |                      | No effects observed                  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |          | 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 alkoxylate                                       |          | No data available  |         |        |                      |                                      |
| citric acid  |          | No data available  |         |        |                      |                                      |
| sodium cumenesulphonate  |          | No data available  |         |        |                      |                                      |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |          | 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 alkoxylate                                       |          | No data available  |         |        |                      |                                      |
| citric acid  |          | No data available  |         |        |                      |                                      |
| sodium cumenesulphonate  |          | No data available  |         |        |                      |                                      |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |          | 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 alkoxylate                                       |                |          | No data available  |         |        |               |                                      |        |
| citric acid  |                |          | No data available  |         |        |               |                                      |        |
| sodium cumenesulphonate  |                |          | No data available  |         |        |               |                                      |        |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |                |          | No data available  |         |        |               |                                      |        |

STOT-single exposure

| Ingredient(s)  | Affected organ(s) |
|--|-------------------|
| alkyl alcohol alkoxylate                                       | No data available |
| citric acid  | No data available |
| sodium cumenesulphonate  | Not applicable    |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available |

STOT-repeated exposure

| Ingredient(s)  | Affected organ(s) |
|--|-------------------|
| alkyl alcohol alkoxylate                                       | No data available |
| citric acid  | No data available |
| sodium cumenesulphonate  | Not applicable    |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available |

**Aspiration hazard**

Substances with an aspiration hazard (H304), if any, are listed in section 3.

**Potential adverse health effects and symptoms**

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

**11.2 Information on other hazards**



## Bactosol Rinse Aid

**11.2.1 Endocrine disrupting properties**

Endocrine disrupting properties - Human data, if available:

**11.2.2 Other information**

No other relevant information available.

**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 alkoxyolate                                      | LC <sub>50</sub> | > 1 - 10     | <i>Leuciscus idus</i> | Method not given   | 96                |
| citric acid  | LC <sub>50</sub> | 440          | <i>Leuciscus idus</i> | Method not given   | 48                |
| sodium cumenesulphonate  | LC <sub>50</sub> | > 1000       | <i>Fish</i>           | EPA-OPPTS 850.1075 | 96                |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | LC <sub>50</sub> | > 1-10       | <i>Fish</i>           | OECD 203 (EU C.1)  | 96                |

Aquatic short-term toxicity - crustacea

| Ingredient(s)  | Endpoint         | Value (mg/l) | Species                     | Method            | Exposure time (h) |
|--|------------------|--------------|-----------------------------|-------------------|-------------------|
| alkyl alcohol alkoxyolate                                      | EC <sub>50</sub> | > 1 - 10     | <i>Daphnia magna Straus</i> | Method not given  | 48                |
| citric acid  | EC <sub>50</sub> | 1535         | <i>Daphnia magna Straus</i> | Method not given  | 24                |
| sodium cumenesulphonate  | EC <sub>50</sub> | > 1000       | <i>Daphnia magna Straus</i> | OECD 202 (EU C.2) | 48                |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | EC <sub>50</sub> | ≤ 1          | <i>Daphnia magna Straus</i> | OECD 202 (EU C.2) | 48                |

Aquatic short-term toxicity - algae

| Ingredient(s)  | Endpoint                       | Value (mg/l)      | Species                        | Method             | Exposure time (h)                             |
|--|--------------------------------|-------------------|--------------------------------|--------------------|---|
| alkyl alcohol alkoxyolate                                      |                                | No data available |                                |                    |   |
| citric acid  | LC <sub>50</sub>               | 425               | <i>Scenedesmus quadricauda</i> | Method not given   | 168   |
| sodium cumenesulphonate  | E <sub>b</sub> C <sub>50</sub> | > 230             | <i>Not specified</i>           | EPA OPPTS 850.5400 | 96  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | EC <sub>50</sub>               | ≤ 1               | <i>Desmodesmus subspicatus</i> | OECD 201 (EU C.3)  | RM000517/<br>RM002677<br>BASF EU<br>RSDS 2021 |

Aquatic short-term toxicity - marine species

| Ingredient(s)  | Endpoint | Value (mg/l)      | Species | Method | Exposure time (days) |
|--|----------|-------------------|---------|--------|----------------------|
| alkyl alcohol alkoxyolate                                      |          | No data available |         |        |                      |
| citric acid  |          | No data available |         |        |                      |
| sodium cumenesulphonate  |          | No data available |         |        |                      |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |          | No data available |         |        |                      |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s)  | Endpoint                       | Value (mg/l)      | Inoculum                  | Method           | Exposure time |
|--|--------------------------------|-------------------|---------------------------|------------------|---------------|
| alkyl alcohol alkoxyolate                                      | EC <sub>10</sub>               | > 1000            | <i>Activated sludge</i>   | DEV-L2           |               |
| citric acid  | EC <sub>50</sub>               | > 10000           | <i>Pseudomonas putida</i> | Method not given | 16 hour(s)    |
| sodium cumenesulphonate  | E <sub>r</sub> C <sub>50</sub> | > 1000            | <i>Bacteria</i>           | OECD 209         | 3 hour(s)     |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |                                | No data available |                           |                  |               |

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

## Bactosol Rinse Aid

| Ingredient(s)  | Endpoint | Value (mg/l)      | Species | Method | Exposure time | Effects observed |
|--|----------|-------------------|---------|--------|---------------|------------------|
| alkyl alcohol alkoxylate                                       |          | No data available |         |        |               |                  |
| citric acid  |          | No data available |         |        |               |                  |
| sodium cumenesulphonate  |          | No data available |         |        |               |                  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |          | No data available |         |        |               |                  |

## Aquatic long-term toxicity - crustacea

| Ingredient(s)  | Endpoint | Value (mg/l)      | Species              | Method           | Exposure time | Effects observed |
|--|----------|-------------------|----------------------|------------------|---------------|------------------|
| alkyl alcohol alkoxylate                                       | NOEC     | > 0.1 - 1         | <i>Daphnia magna</i> | OECD 202         | 21 day(s)     |                  |
| citric acid  |          | No data available |                      |                  |               |                  |
| sodium cumenesulphonate  |          | No data available |                      |                  |               |                  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | NOEC     | > 0.1-1           | <i>Daphnia magna</i> | Method not given | 21 day(s)     |                  |

## 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 alkoxylate                                       |          | No data available         |         |        |                      |                  |
| citric acid  |          | No data available         |         |        |                      |                  |
| sodium cumenesulphonate  |          | No data available         |         |        |                      |                  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated |          | 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 |
|---------------|----------|-----------------------|---------|--------|----------------------|------------------|
| citric acid   |          | No data available     |         |        |                      |                  |

## Terrestrial toxicity - plants, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---------------|----------|-----------------------|---------|--------|----------------------|------------------|
| citric acid   |          | No data available     |         |        |                      |                  |

## Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value             | Species | Method | Exposure time (days) | Effects observed |
|---------------|----------|-------------------|---------|--------|----------------------|------------------|
| citric acid   |          | No data available |         |        |                      |                  |

## Terrestrial toxicity - beneficial insects, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---------------|----------|-----------------------|---------|--------|----------------------|------------------|
| citric acid   |          | No data available     |         |        |                      |                  |

## Terrestrial toxicity - soil bacteria, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---------------|----------|-----------------------|---------|--------|----------------------|------------------|
| citric acid   |          | 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 |
|---------------|-------------------|--------|------------|--------|
| citric acid   | No data available |        |            |        |

## Bactosol Rinse Aid

Abiotic degradation - hydrolysis, if available:

| Ingredient(s) | Half-life time in fresh water | Method | Evaluation | Remark |
|---------------|-------------------------------|--------|------------|--------|
| citric acid   | No data available             |        |            |        |

Abiotic degradation - other processes, if available:

| Ingredient(s) | Type | Half-life time    | Method | Evaluation | Remark |
|---------------|------|-------------------|--------|------------|--------|
| citric acid   |      | No data available |        |            |        |

**Biodegradation**

Ready biodegradability - aerobic conditions

| Ingredient(s)  | Inoculum                 | Analytical method          | DT <sub>50</sub>        | Method    | Evaluation            |
|--|--------------------------|----------------------------|-------------------------|-----------|-----------------------|
| alkyl alcohol alkoxylate                                       | Activated sludge, aerobe | CO <sub>2</sub> production | > 60 % in 28 day(s)     | OECD 301B | Readily biodegradable |
| citric acid  |                          |                            | 97 % in 28 day(s)       | OECD 301B | Readily biodegradable |
| sodium cumenesulphonate  |                          | CO <sub>2</sub> production | 103 - 109% in 28 day(s) | OECD 301B | Readily biodegradable |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | Activated sludge, aerobe | CO <sub>2</sub> production | > 60% in 28 day(s)      | OECD 301B | Readily biodegradable |

Ready biodegradability - anaerobic and marine conditions, if available:

| Ingredient(s) | Medium & Type | Analytical method | DT <sub>50</sub> | Method | Evaluation        |
|---------------|---------------|-------------------|------------------|--------|-------------------|
| citric acid   |               |                   |                  |        | No data available |

Degradation in relevant environmental compartments, if available:

| Ingredient(s) | Medium & Type | Analytical method | DT <sub>50</sub> | Method | Evaluation        |
|---------------|---------------|-------------------|------------------|--------|-------------------|
| citric acid   |               |                   |                  |        | No data available |

**12.3 Bioaccumulative potential**

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s)  | Value             | Method           | Evaluation                  | Remark |
|--|-------------------|------------------|-----------------------------|--------|
| alkyl alcohol alkoxylate                                       | No data available |                  |                             |        |
| citric acid  | -1.72             |                  | No bioaccumulation expected |        |
| sodium cumenesulphonate  | -1.1              | Method not given | No bioaccumulation expected |        |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | No data available |                  |                             |        |

Bioconcentration factor (BCF)

| Ingredient(s)  | Value             | Species | Method | Evaluation | Remark |
|--|-------------------|---------|--------|------------|--------|
| alkyl alcohol alkoxylate                                       | No data available |         |        |            |        |
| citric acid  | No data available |         |        |            |        |
| sodium cumenesulphonate  | No data available |         |        |            |        |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | 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                                       |
|--|--------------------------------|-------------------------------------|--------|--------------------|--|
| alkyl alcohol alkoxylate                                       | No data available              |                                     |        |                    |  |
| citric acid  | No data available              |                                     |        |                    | Potential for mobility in soil, soluble in water |
| sodium cumenesulphonate  | No data available              |                                     |        |                    |  |
| Alcohols, C12-15-branched and linear, ethoxylated propoxylated | 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 Endocrine disrupting properties**

Endocrine disrupting properties - Environmental effects, if available:

## Bactosol Rinse Aid

**12.7 Other adverse effects**

No other adverse effects known.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****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 30 - detergents other than those mentioned in 20 01 29.

**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

**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 and the IBC Code:** Non-dangerous goods

**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
- substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

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

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

non-ionic surfactants

5 - 15 %

polycarboxylates

< 5 %

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.

**Seveso - Classification:** Not classified

**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:** 683532

**Version:** 05.1

**Revision:** 2022-12-01

**Reason for revision:**

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 2, 4, 6, 7, 9, 10, 11, 12, 16, 15

**Bactosol Rinse Aid****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.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H412 - Harmful to aquatic life with long lasting effects.

**Abbreviations and acronyms:**

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

**End of Safety Data Sheet**