

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

Deosan Mastocide AG201

Revision: 2015-11-26 Version: 01.0

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

1.1 Product identifier

Trade name: Deosan Mastocide AG201

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

For professional use only.

Animal care product, skin disinfectant. Manual process (AISE_CSP01 & AISE_CSP08) Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: MSDSinfoUK@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

The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Aquatic Chronic 2 (H411)

The product does not meet the criteria for classification in accordance with Directive 1999/45/EC and corresponding national legislation

2.2 Label elements



Hazard statements:

H411 - Toxic to aquatic life with long lasting effects.

2.3 Other hazards

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Ingredient(s) | EC number | CAS number | REACH number | Classification | Classification (1999/45/EC) | Notes | Weight percent |
|---------------------------|-----------|------------|-------------------|-------------------|--------------------------------|-------|----------------|
| propane-1,2-diol | 200-338-0 | 57-55-6 | 01-2119456809-23 | Not classified | - | | 3-10 |
| glycerol | 200-289-5 | 56-81-5 | 01-2119471987-18 | Not classified | - | | 1-3 |
| chlorhexidine digluconate | 242-354-0 | 18472-51-0 | No data available | Eye Dam. 1 (H318) | Xi;R41 | | 0.1-1 |



| | Aquatic Acute 1 (H400) Aquatic Chronic 1 | N;R50 | |
|--|--|-------|--|
| | Aquatic Chronic 1 (H410) | | |

^{*} Polymer.

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

- Workplace exposure limit(s), if available, are listed in subsection 8.1.
 [1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required. [2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
- [3] Exempted: Annex V of Regulation (EC) No 1907/2006
- [4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Get medical attention or advice if you feel unwell.

Skin contact: If skin irritation occurs: Get medical advice or attention. Wash skin with plenty of lukewarm, gently

flowing water.

Eye contact: If irritation occurs and persists, get medical attention. Rinse cautiously with water for several

minutes.

Ingestion: Get medical attention or advice if you feel unwell. Immediately drink 1 glass of water. Rinse mouth.

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

4.2 Most important symptoms and effects, both acute and delayed

No known effects or symptoms in normal use. Inhalation: Skin contact: No known effects or symptoms in normal use. Eye contact: No known effects or symptoms in normal use. 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

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

No special measures required.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Use personal protective equipment as required. 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 | 450 ppm total |
| | particulates and vapour | particulate and vapour |
| | 474 mg/m3 total | 1422 mg/m ³ total |
| | particulates and vapour | particulate and vapour |
| | 10 mg/m³ particulates | 30 mg/m³ particulate |
| glycerol | 10 mg/m ³ mist | 30 mg/m ³ mist |

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and **PNEC** values

Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

| Ingredient(s) | Short term - Local | Short term - Systemic | Long term - Local | Long term - Systemic |
|---------------------------|--------------------|-----------------------|-------------------|----------------------|
| | effects | effects | effects | effects |
| propane-1,2-diol | i | - | - | - |
| glycerol | - | - | - | 229 |
| chlorhexidine digluconate | 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) |
|---------------------------|----------------------------|--|---------------------------|---|
| propane-1,2-diol | No data available | - | No data available | - |
| glycerol | No data available | - | No data available | - |
| chlorhexidine digluconate | No data available | No data available | No data available | No data available |

DNEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---------------------------|----------------------------|--|---------------------------|---|
| propane-1,2-diol | No data available | - | No data available | - |
| glycerol | No data available | - | No data available | - |
| chlorhexidine digluconate | 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 |
|---------------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| propane-1,2-diol | - | - | 10 | 168 |
| glycerol | - | - | - | 56 |
| chlorhexidine digluconate | 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 |
|---------------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| propane-1,2-diol | - | - | 10 | 50 |
| glycerol | - | - | - | 33 |
| chlorhexidine digluconate | 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) |
|---------------------------|-----------------------------|------------------------------|---------------------|-------------------------------|
| propane-1,2-diol | 260 | 26 | 183 | 20000 |
| glycerol | 0.885 | 0.0885 | 8.85 | 1000 |
| chlorhexidine digluconate | No data available | No data available | No data available | No data available |

Environmental exposure - PNEC, continued

| Ingredient(s) | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m³) |
|---------------------------|------------------------------|-----------------------------|-------------------|-------------------|
| propane-1,2-diol | 572 | 57.2 | 50 | - |
| glycerol | 3.3 | 0.33 | 0.141 | - |
| chlorhexidine digluconate | 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.

Personal protective equipment

Hand protection:

Body protection:

Respiratory protection:

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. No special requirements under normal use conditions. No special requirements under normal use conditions. No special requirements under normal use conditions.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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

Method / remark

Physical State: Liquid
Colour: Dark, Purple
Odour: Slightly perfumed
Odour threshold: Not applicable

pH: ≈ 5 (neat)

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

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

Substance data, boiling point

| Ingredient(s) | Value | Method | Atmospheric pressure |
|---------------------------|-------------------|------------------|----------------------|
| | (°C) | | (hPa) |
| propane-1,2-diol | 185-190 | Method not given | 1013 |
| glycerol | 290 | Method not given | 1013 |
| chlorhexidine digluconate | No data available | | |

Method / remark

Flash point (°C): Not applicable. Sustained combustion: Not applicable. Evaporation rate: Not determined Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

| Cubstance data, narrinability of explosive limits, if available. | | |
|--|------------------------|------------------------|
| Ingredient(s) | Lower limit (% vol) | Upper limit (% vol) |
| propane-1,2-diol | 2.6 | 12.6 |
| glycerol | 2.7 | 19 |

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

| Substance data, vapour pressure | | | |
|---------------------------------|-------------------|------------------|-------------|
| Ingredient(s) | Value | Method | Temperature |
| | (Pa) | | (°C) |
| propane-1,2-diol | 18.6 | Method not given | 20 |
| glycerol | < 1 | Method not given | 20 |
| chlorhexidine digluconate | No data available | | |

Method / remark

Vapour density: Not determined Relative density: 1.01 g/cm³ (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|---------------------------|-------------------|------------------|---------------------|
| propane-1,2-diol | Soluble | Method not given | |
| glycerol | 500 | Method not given | 20 |
| chlorhexidine digluconate | 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: ≈ 475 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

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

No data is available on the mixture

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

Acute toxicity

Acute oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|---------------------------|----------|----------------------|---------|------------------|-------------------|
| propane-1,2-diol | LD 50 | > 10000 | Rat | Method not given | |
| glycerol | LD 50 | 12600 | Rat | Method not given | |
| chlorhexidine digluconate | | No data available | | | |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|---------------------------|----------|----------------------|---------|------------------|-------------------|
| propane-1,2-diol | LD 50 | > 2000 | Rabbit | Method not given | |
| glycerol | LD 50 | > 10000 | Rabbit | Method not given | |
| chlorhexidine digluconate | | No data available | | | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure |
|---------------------------|----------|-----------------|---------|--------------------|----------|
| | | (mg/l) | | | time (h) |
| propane-1,2-diol | LC 50 | > 317 (mist) No | Rabbit | Non guideline test | |
| | | mortality | | | |
| | | observed | | | |
| glycerol | | No data | | | |
| · | | available | | | |
| chlorhexidine digluconate | | No data | | | |
| _ | | available | | | |

Irritation and corrosivity Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---------------------------|-------------------|---------|-------------------|---------------|
| propane-1,2-diol | Not irritant | Rabbit | OECD 404 (EU B.4) | |
| glycerol | Not irritant | | OECD 404 (EU B.4) | |
| chlorhexidine digluconate | No data available | | | |

Eve irritation and corrosivity

| Lye initation and corrosivity | | | | |
|-------------------------------|------------------------------|---------|-------------------|---------------|
| Ingredient(s) | Result | Species | Method | Exposure time |
| propane-1,2-diol | Not corrosive or irritant | Rabbit | OECD 405 (EU B.5) | |
| glycerol | Not corrosive or irritant | | Method not given | |
| chlorhexidine digluconate | No data available | | _ | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---------------------------|-------------------|---------|--------|---------------|
| propane-1,2-diol | No data available | | | |
| glycerol | No data available | | | |
| chlorhexidine digluconate | No data available | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|---------------------------|-------------------|------------|----------------------|-------------------|
| propane-1,2-diol | Not sensitising | Guinea pig | OECD 406 (EU B.6) / | |
| | | | GPMT | |
| glycerol | Not sensitising | Human | Human repeated patch | |
| | | | test | |
| chlorhexidine digluconate | No data available | | | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|---------------------------|-------------------|---------|--------|---------------|
| propane-1,2-diol | No data available | | | |
| glycerol | No data available | | | |
| chlorhexidine digluconate | 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) |
|---------------------------|---|--------------------------|-------------------|---------------------|
| propane-1,2-diol | No evidence for mutagenicity, negative test results | Method not given | No data available | |
| glycerol | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) | No data available | |
| chlorhexidine digluconate | No data available | | No data available | |

Carcinogenicity

| · · · · · · · · · · · · · · · · · · | |
|-------------------------------------|--|
| Ingredient(s) | Effect |
| propane-1,2-diol | No evidence for carcinogenicity, negative test results |
| glycerol | No evidence for carcinogenicity, negative test results |
| chlorhexidine digluconate | 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 |
|------------------------------|----------|-----------------|-----------------------|---------|--------|---------------|---------------------------------------|
| propane-1,2-diol | | | No data available | | | | No evidence for reproductive toxicity |
| glycerol | | | No data available | | | | Not toxic for reproduction |
| chlorhexidine digluconate | | | 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 |
|---------------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| propane-1,2-diol | | No data | | | | |
| | | available | | | | |
| glycerol | | No data | | | | |
| | | available | | | | |
| chlorhexidine digluconate | | 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 |
|---------------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| propane-1,2-diol | | No data | | | | |
| | | available | | | | |
| glycerol | | No data | | | | |
| · | | available | | | | |
| chlorhexidine digluconate | | No data | | | | |
| | | available | | | | |

Sub-chronic inhalation toxicity

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Specific effects and organs |
|---------------------------|----------|--------------|---------|--------|-------------|-----------------------------|
| | | (mg/kg bw/d) | | | time (days) | affected |
| propane-1,2-diol | | No data | | | | |
| · | | available | | | | |
| glycerol | | No data | | | | |
| | | available | | | | |
| chlorhexidine digluconate | | No data | | | | |
| | | available | | | | |

Chronic toxicity

| Ingredient(s) | Exposure | Endpoint | Value | Species | Method | Exposure | Specific effects and | Remark |
|------------------|----------|----------|--------------|---------|--------|----------|----------------------|--------|
| | route | | (mg/kg bw/d) | , | | time | organs affected | |
| propane-1,2-diol | | | No data | | | | | |
| | | | available | | | | | |
| glycerol | | | No data | | | | | |
| | | | available | | | | | |
| chlorhexidine | | | No data | | | | | |
| digluconate | 1 | | available | | | | | |

STOT-single exposure

| STOT Single exposure | |
|---------------------------|-------------------|
| Ingredient(s) | Affected organ(s) |
| propane-1,2-diol | No data available |
| glycerol | No data available |
| chlorhexidine digluconate | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|---------------------------|-------------------|
| propane-1,2-diol | No data available |
| glycerol | No data available |
| chlorhexidine digluconate | 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) |
|---------------------------|----------|----------------------|------------------------|------------------|-------------------|
| propane-1,2-diol | LC 50 | > 1000 | Fish | Method not given | 24 |
| glycerol | LC 50 | 54000 | Oncorhynchus mykiss | Method not given | 96 |
| chlorhexidine digluconate | | No data available | | | |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---------------------------|----------|----------------------|-------------------------|------------------|-------------------|
| propane-1,2-diol | EC 50 | > 100 | Daphnia | Method not given | 48 |
| glycerol | EC 50 | > 10000 | Daphnia magna Straus | Method not given | 24 |
| chlorhexidine digluconate | | No data available | | | |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---------------------------|----------|-------------------|----------------------------|----------|-------------------|
| propane-1,2-diol | EC 50 | 24200 | Desmodesmus subspicatus | OECD 201 | 72 |
| glycerol | | No data available | | | - |
| chlorhexidine digluconate | | No data available | | | |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---------------------------|----------|----------------------|---------|--------|----------------------|
| propane-1,2-diol | | No data available | | | = |
| glycerol | | No data available | | | - |
| chlorhexidine digluconate | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---------------------------|----------|----------------------|--------------------|------------------|---------------|
| propane-1,2-diol | EC o | > 20000 | Pseudomonas putida | Method not given | 18 hour(s) |
| glycerol | EC 50 | > 10000 | Pseudomonas putida | Method not given | 16 hour(s) |
| chlorhexidine digluconate | | No data available | | | |

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

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---------------------------|----------|-----------------|---------|--------|---------------|------------------|
| propane-1,2-diol | | No data | | | unie | |
| | | available | | | | |
| glycerol | | No data | | | | |
| | | available | | | | |
| chlorhexidine digluconate | | No data | | | | |
| | | available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---------------------------|----------|----------------------|-----------------------|------------------|---------------|------------------|
| propane-1,2-diol | NOEC | 13020 | Ceriodaphnia dubia | Method not given | 7 day(s) | |
| glycerol | | No data available | | | | |
| chlorhexidine digluconate | | 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 |
|---------------------------|----------|---------------------------------|---------|--------|----------------------|------------------|
| propane-1,2-diol | | No data available | | | - | |
| glycerol | | No data available | | | - | |
| chlorhexidine digluconate | | 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 |
|------------------|----------|-----------------------------|---------|--------|----------------------|------------------|
| propane-1,2-diol | | No data | | | - | |
| | | available | | | | |
| glycerol | | No data | | | - | |
| | | available | | | | |

Terrestrial toxicity - plants, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|------------------|----------|-----------------------------|---------|--------|----------------------|------------------|
| propane-1,2-diol | | No data | | | - | |
| | | available | | | | |
| glycerol | | No data available | | | - | |

Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
|------------------|----------|----------------------|---------|--------|----------------------|------------------|
| propane-1,2-diol | | No data available | | | - | |
| glycerol | | No data available | | | - | |

Terrestrial toxicity - beneficial insects, if available:

| refrestrial toxicity - beneficial filsects, if available. | | | | | | |
|---|----------|-----------|---------|--------|-------------|------------------|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
| • ,, | | (mg/kg dw | • | | time (days) | |
| | | soil) | | | (, -, | |
| propane-1,2-diol | | No data | | | - | |
| , · | | available | | | | |
| glycerol | | No data | | | - | |
| | | available | | | | |

Terrestrial toxicity - soil bacteria, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|------------------|----------|-----------------------------|---------|--------|----------------------|------------------|
| propane-1,2-diol | | No data available | | | - | |
| glycerol | | No data available | | | - | |

12.2 Persistence and degradability

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

| Ingredient(s) | Inoculum | Analytical method | DT 50 | Method | Evaluation |
|---------------------------|----------|-------------------|------------------------|------------------|-----------------------|
| propane-1,2-diol | | | > 70 % in 28 day(s) | OECD 301A | Readily biodegradable |
| glycerol | | | 60% in 28 day(s) | Method not given | Readily biodegradable |
| chlorhexidine digluconate | | | | | 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 |
|---------------------------|-------------------|------------------|-----------------------------|--------|
| propane-1,2-diol | -1.07 | Method not given | No bioaccumulation expected | |
| glycerol | -1.76 | Method not given | No bioaccumulation expected | |
| chlorhexidine digluconate | No data available | | | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|------------------------------|-------------------|---------|--------|------------|--------|
| propane-1,2-diol | No data available | | | | |
| glycerol | No data available | | | | |
| chlorhexidine digluconate | 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 |
|------------------|--------------------------------------|---|--------|-----------------------|--|
| propane-1,2-diol | No data available | | | | Potential for mobility in soil, soluble in water |
| glycerol | No data available | | | | Potential for mobility in soil, soluble in water |

chlorhexidine digluconate No data available

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Waste from residues / unused products:

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: 16 03 05* - organic wastes 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



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

14.1 UN number: 3082

14.2 UN proper shipping name:

Environmentally hazardous substance, liquid, n.o.s. (chlorhexidine digluconate)

14.3 Transport hazard class(es):

Class: 9 Label(s): 9

14.4 Packing group: III

14.5 Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

ADR

Classification code: M6
Tunnel restriction code: E
Hazard identification number: 90

IMO/IMDG

EmS: F-A, S-F

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations:

Regulation (EU) No 528/2012 on biocidal products

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

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: MS1001768 Version: 01.0 Revision: 2015-11-26

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

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

- H318 Causes serious eye damage.H400 Very toxic to aquatic life.
- + H410 Very toxic to aquatic life with long lasting effects.
 + R41 Risk of serious damage to eyes.
- R50 Very toxic to aquatic organisms.

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