

Safety Data Sheet

SURFACE SANITISER SMARTDOSE

Revision: 2018-11-20 **Version:** 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SURFACE SANITISER SMARTDOSE

1.2 Recommended use and restrictions on use

Identified uses: Hard surface sanitiser Restrictions of use:

Uses other than those identified are not recommended

1.3 Details of the supplier

DIVERSEY NEW ZEALAND LTD.

24 Bancroft Crescent, Glendene, Auckland, 0602, New Zealand

Telephone: +64 9 813 9800; 0800 803 615 (toll free)

Fax: + 64 9 813 9801 Website: www.diversey.com

1.4 Emergency telephone number

Call 0800 243 622 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

HSNO Classification

6.1E - Acutely toxic (oral)

6.3A - Irritating to the skin

8.3A - Corrosive to ocular tissue

9.1C - Harmful in the aquatic environment

GHS Equivalent Classification

Serious eye damage, Category 1 Acute toxicity, oral, Category 5 Skin irritation, Category 2 Chronic aquatic toxicity, Category 3

2.2 Label elements



Signal word: Danger

Hazard statements:

H303 - May be harmful if swallowed.

H315 - Causes skin irritation

H318 - Causes serious eye damage.

H401 - Toxic to aquatic life.

H412 - Harmful to aquatic life with long lasting effects.

Prevention statement(s):

P233 - Keep container tightly closed.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

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

Response statement(s):

P332 + P313 - If skin irritation occurs: Get medical advice or attention.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P321 - Specific treatment (see supplemental first aid instructions on this label).

P362 - Take off contaminated clothing.

Disposal statement(s):

P501 - Dispose of unused content as chemical waste.

2.3 Other hazards

No other hazards known.

2.4 Classification diluted product:

Recommended maximum concentration (%): 0.44

GHS Equivalent Classification

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

| Ingredient(s) | CAS number | EC number | Weight percent |
|---|------------|-----------|----------------|
| Alcohols, C12-15, ethoxylated | 68131-39-5 | [4] | 3-10 |
| sodium carbonate | 497-19-8 | 207-838-8 | 1-3 |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | 68956-79-6 | 273-318-2 | 1-3 |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | 68391-01-5 | 269-919-4 | 1-3 |

^{*} Polymer

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if

you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. If skin irritation 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. Get medical attention or advice if you feel unwell.

Self-protection of first aider:Consider personal protective equipment as indicated in subsection 8.2. **First aid facilities:**Eyewash facilities should be considered in a workplace where necessary.

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.

Poison Information Center: Call 0800 764 766 (0800 POISON)

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.

5.4 Hazchem code

None allocated

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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). Use neutralising agent.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original packaging. Store in a closed container. Keep from freezing.

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

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Workplace exposure limits

Air limit values, if available:

Biological limit values, if 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: 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).

Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and Hand protection:

breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such

as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material

thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm

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

No special requirements under normal use conditions. **Body protection:** No special requirements under normal use conditions. Respiratory protection:

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

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

Recommended maximum concentration (%): 0.44

Appropriate engineering controls: Use only in well ventilated areas.

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

Personal protective equipment

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

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

No special requirements under normal use conditions. **Body protection:** 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

Physical State: Liquid Colour: Clear, Red Odour: Bland

Odour threshold: Not applicable

pH: ≈ 11.7 (neat) ISO 4316

Melting point/freezing point (°C): Not determined Not relevant to classification of this product

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

Flammability (liquid): Not flammable.

Flash point (°C): > 93.4 closed cup

Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined

Flammability (solid, gas): Not applicable to liquids Upper/lower flammability limit (%): Not determined

Vapour pressure: Not determined

Vapour density: Not determined

Relative density: ≈ 1.04 (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Partition coefficient: n-octanol/water No information available. Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Autoignition temperature: Not determined Decomposition temperature: Not applicable.

Viscosity: Not determined Explosive properties: Not explosive. Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined Corrosion to metals: Not corrosive

Not relevant to classification of this product

Not relevant to classification of this product

Not relevant to classification of this product

Method / remark

OECD 109 (EU A.3)

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

Reacts with acids.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Relevant calculated ATE(s):

ATE - Oral (mg/kg): 4600 ATE - Dermal (mg/kg): >5000 ATE - Inhalatory, mists (mg/l): >20

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) |
|---|----------|----------------------|---------|------------------|-------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | |
| sodium carbonate | LD 50 | 2800 | Rat | Method not given | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | LD 50 | 344 | Rat | Method not given | |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|---|----------|----------------------|---------|------------------|-------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | |
| sodium carbonate | LD 50 | > 2000 | Rabbit | Method not given | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | LD 50 | 930 | Rat | Method not given | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|----------|----------------------|---------|-------------------|-------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | |
| sodium carbonate | LC 50 | 2.3 (dust) | Rat | OECD 403 (EU B.2) | 2 |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | LC 50 | 0.054 | | Method not given | |

Irritation and corrosivity Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|-------------------|---------------|
| Alcohols, C12-15, ethoxylated | No data available | | | |
| sodium carbonate | Not irritant | Rabbit | OECD 404 (EU B.4) | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | No data available | | | _ |

Eye irritation and corrosivity

| Lye initation and corrosivity | | | | |
|---|-------------------|---------|------------------|---------------|
| Ingredient(s) | Result | Species | Method | Exposure time |
| Alcohols, C12-15, ethoxylated | No data available | | | |
| sodium carbonate | Irritant | Rabbit | Method not given | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | No data available | | | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| Alcohols, C12-15, ethoxylated | No data available | | | |
| sodium carbonate | No data available | | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | No data available | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|-------------------------------|-------------------|---------|------------------|-------------------|
| Alcohols, C12-15, ethoxylated | No data available | | | |
| sodium carbonate | Not sensitising | | Method not given | |

| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available | | |
|---|-------------------|--|--|
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | No data available | | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| Alcohols, C12-15, ethoxylated | No data available | | | |
| sodium carbonate | No data available | | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | No data available | · | | · |

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

| Mulagericity | | | | |
|---|--|-----------------------|------------------------------|--------------------|
| Ingredient(s) | Result (in-vitro) | Method | Result (in-vivo) | Method |
| | | (in-vitro) | | (in-vivo) |
| Alcohols, C12-15, ethoxylated | No data available | | No data available | |
| sodium carbonate | No data available | | No data available | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available | | No data available | |
| | No evidence for genotoxicity, weight of evidence | Weight of evidence | No evidence for mutagenicity | Weight of evidence |

Carcinogenicity

| Carcinogenicity | |
|---|---|
| Ingredient(s) | Effect |
| Alcohols, C12-15, ethoxylated | No data available |
| sodium carbonate | No evidence for carcinogenicity, weight-of-evidence |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, | No data available |
| chlorides | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | No evidence for carcinogenicity, weight-of-evidence |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|--|----------|-----------------|-----------------------|---------|--------|---------------|------------------------------------|
| Alcohols, C12-15, ethoxylated | | | No data available | | | | |
| sodium carbonate | | | No data available | | | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphen yl)methyl]dimethyl, chlorides | | | No data available | | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldim ethyl, chlorides | | | 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 |
|--|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| | | | | | unie (uays) | anecteu |
| Alcohols, C12-15, ethoxylated | | No data | | | | |
| | | available | | | | |
| sodium carbonate | | No data | | | | |
| | | available | | | | |
| quaternary ammonium compounds, | | No data | | | | |
| C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | available | | | | |
| quaternary ammonium compounds, | | No data | | | | |
| benzyl-C12-18-alkyldimethyl, chlorides | | available | | | | |

Sub-chronic dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|--|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | | |
| sodium carbonate | | No data available | | | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | 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 |
|-------------------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | | |

| sodium carbonate | No data available | | |
|--|----------------------|--|--|
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | 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 |
|--|----------------|----------|-----------------------|---------|--------|---------------|---|--------|
| Alcohols, C12-15, ethoxylated | | | No data available | | | | | |
| sodium carbonate | | | No data available | | | | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphen yl)methyl]dimethyl, chlorides | | | No data available | | | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldim ethyl, chlorides | | | No data available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|---|-------------------|
| Alcohols, C12-15, ethoxylated | No data available |
| sodium carbonate | No data available |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, | No data available |
| chlorides | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | Not applicable |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|---|-------------------|
| Alcohols, C12-15, ethoxylated | No data available |
| sodium carbonate | No data available |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, | No data available |
| chlorides | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | Not applicable |

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

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) |
|---|----------|----------------------|------------------------|------------------|-------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | |
| sodium carbonate | LC 50 | 300 | Lepomis macrochirus | Method not given | 96 |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | No data | | | |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|----------|-----------------|--------------|------------------|-------------------|
| Alcohols, C12-15, ethoxylated | | No data | | | |
| | | available | | | |
| sodium carbonate | EC 50 | 265 | Daphnia | Method not given | 96 |
| | | | magna Straus | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, | | No data | | | |
| chlorides | | available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | No data | | | |
| | | available | | | |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|----------|----------------------|---------|--------|-------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | |
| sodium carbonate | | No data available | | | - |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | No data available | | | |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---|----------|----------------------|---------|--------|----------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | |
| sodium carbonate | | No data available | | | - |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---|----------|----------------------|----------|--------|---------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | |
| sodium carbonate | | No data available | | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | No data available | | | |

Aquatic long-term toxicity

| Aquatic long-term toxicity - lish | | | | | _ | |
|--|----------|-----------|---------|--------|----------|------------------|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
| | | (mg/l) | | | time | |
| Alcohols, C12-15, ethoxylated | | No data | | | | |
| · | | available | | | | |
| sodium carbonate | | No data | | | | |
| | | available | | | | |
| quaternary ammonium compounds, | | No data | | | | |
| C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | available | | | | |
| quaternary ammonium compounds, | | No data | | | | |
| benzyl-C12-18-alkyldimethyl, chlorides | | available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|----------------------|---------|--------|---------------|------------------|
| Alcohols, C12-15, ethoxylated | | No data available | | | | |
| sodium carbonate | | No data available | | | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | No data available | | | | |

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
|--|----------|------------------------|---------|--------|-------------|------------------|
| | | (mg/kg dw sediment) | | | time (days) | |
| Alcohols, C12-15, ethoxylated | | No data available | | | | |
| sodium carbonate | | No data available | | | - | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | No data available | | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | No data available | | | | |

Terrestrial toxicity

| errestrial toxicity - soil invertebrates, including earthworms, if available. | | | | | | | | |
|---|----------|-----------|---------|--------|-------------|------------------|--|--|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed | | |
| • , , | · | (mg/kg dw | · | | time (days) | | | |
| | | soil) | | | , , , | | | |
| sodium carbonate | | No data | | | - | | | |

| | | available | | | | |
|---|----------|-----------------------------|---------|-------------|----------------------|---------------------|
| restrial toxicity - plants, if available: | | | | • | | |
| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
| sodium carbonate | | No data available | | | - | |
| rrestrial toxicity - birds, if available: | | | | | | |
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
| sodium carbonate | | No data available | | | - | |
| rrestrial toxicity - beneficial insects, if available | e: | | | | | |
| L P (/ .) | E . L L. | 1/-1 | | B4 - 41 - 1 | | Effects of a second |

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

Terrestrial toxicity - soil bacteria, if available:

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

12.2 Persistence and degradability Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

| Ingredient(s) | Half-life time in fresh water | Method | Evaluation | Remark |
|------------------|-------------------------------|--------|----------------------|--------|
| sodium carbonate | No data available | | Rapidly hydrolysible | |

Abiotic degradation - other processes, if available:

Biodegradation Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT 50 | Method | Evaluation |
|--|----------|-------------------|-------|------------------|--------------------------------------|
| Alcohols, C12-15, ethoxylated | | | | OECD 301B | Readily biodegradable |
| sodium carbonate | | | | | Not applicable (inorganic substance) |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | | | | | Not readily biodegradable. |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | | | | Method not given | Readily biodegradable |

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 k | artition coefficient n-octanol/water (log Kow) | | | | | | | | |
|--|--|------------------|-----------------------------|--------|--|--|--|--|--|
| Ingredient(s) | Value | Method | Evaluation | Remark | | | | | |
| Alcohols, C12-15, ethoxylated | No data available | | | | | | | | |
| sodium carbonate | No data available | | No bioaccumulation expected | | | | | | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimeth yl, chlorides | No data available | | | | | | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | 3.91 | Method not given | | | | | | | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|--|-------------------|---------|------------------|-----------------------------|--------|
| Alcohols, C12-15, ethoxylated | No data available | | | | |
| sodium carbonate | No data available | | | No bioaccumulation expected | |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphen yl)methyl]dimethyl, chlorides | | | | | |
| quaternary ammonium compounds, | 182.8 | | Method not given | | |

| benzyl-C12-18-alkyldim | | | |
|------------------------|--|--|--|
| ethyl, chlorides | | | |

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 |
|--|--------------------------------------|---|--------|-----------------------|--|
| Alcohols, C12-15, ethoxylated | No data available | | | | |
| sodium carbonate | No data available | | | | Potential for mobility in soil, soluble in water |
| quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | No data available | | | | |
| quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides | No data available | | | | |

12.5 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.

Empty packaging

Dispose of observing national or local regulations. Recommendation:

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

Land transport, 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

Environmentally hazardous: Yes

Marine pollutant: No

Hazchem code: None allocated

14.6 Special precautions for user: Non-dangerous goods

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

Non-dangerous goods Other relevant information:

Transport regulations include special provisions for dangerous goods packed in small quantities classified under UN3077 or UN3082.

SECTION 15: Regulatory information

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

HSR002530. **HSNO Approval Number**

Cleaning Products (Subsidiary Hazard) Group Standard 2017 **Group standard** Inventory Listing(s) New Zealand: NZIoC (New Zealand Inventory of Chemicals) All components are listed on the NZIoC inventory, or are exempt

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: MS32000382 Version: 01.0 Revision: 2018-11-20

Full text of the H phrases mentioned in section 3:

Abbreviations and acronyms:

- · DNEL Derived No Effect Limit
- AUH GHS Specific hazard statement
- PNEC Predicted No Effect Concentration
- ATE Acute Toxicity Estimate
- · LC50 Lethal Concentration, 50% / Median Lethal Concentration
- LD50 Lethal Dose, 50% / Median Lethal dose
- STOT-RE Specific target organ toxicity (repeated exposure)
 STOT-SE Specific target organ toxicity (single exposure)
- EC No. European Community Number

End of Safety Data Sheet