

Safety Data Sheet

DIVERCLEANSE

Revision: 2022-12-17 **Version:** 1.3

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: DIVERCLEANSE

1.2 Recommended use and restrictions on use

Identified uses:

Hospital grade disinfectant **Restrictions of use:**

Uses other than those identified are not recommended

1.3 Details of the supplier

Diversey Australia Pty. Limited
Unit 8, 55 Newton Road, Wetherill Park, NSW, 2164
1-7 Bell Grove, Braeside, VIC 3195
Telephone: 1800 647 779 (toll free)
Email: aucustserv@diversey.com
Website: diversey.com.au

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible) Call 1800 033 111 (24hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin corrosion, Category 1B Serious eye damage, Category 1

2.2 Label elements



Signal word: Danger

Hazard statements:

AUH031 - Contact with acids liberates toxic gas. H314 - Causes severe skin burns and eye damage.

Prevention statement(s):

P233 - Keep container tightly closed.

P260 - Do not breathe vapours.

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):

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

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).

P363 - Wash contaminated clothing before reuse.

Storage statement(s):

P405 - Store locked up.

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 (% w/w): 14.53

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

| Ingredient(s) | CAS# | EC number | Weight |
|--|-----------|-----------|---------|
| | | | percent |
| sodium hypochlorite (active chlorine) | 7681-52-9 | 231-668-3 | 3-10 |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | 1643-20-5 | 216-700-6 | 1-3 |
| sodium hydroxide | 1310-73-2 | 215-185-5 | 1-3 |

Non-hazardous ingredients are the remainder and add up to 100%.

[4] 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

General Information: If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is

irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose

resuscitation. Use Ambu bag or ventilator.

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

vou feel unwell.

Skin contact: Take off immediately all contaminated clothing and wash it before reuse. Immediately call a

POISON CENTRE, doctor or physician.

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.

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious Ingestion:

person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or

physician.

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

First aid facilities: Shower and eyewash facilities should be considered in a workplace where necessary.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause bronchospasm in chlorine sensitive individuals.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

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

oesophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed

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

in section 11.

Poison Information Center: Call 13 11 26 (Australia Wide).

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

2X

- 2 Fine water spray.
- X Liquid-tight chemical protective clothing and breathing apparatus. Contain.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Do not breathe dust or vapour. In case of an incident in a confined area wear suitable respiratory protection. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

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 skin and eyes. Do not breathe vapours. 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. 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:

| Ingredient(s) | Long term value(s) (TWA) | Short term value(s) (STEL) | Peak value(s) |
|------------------|-----------------------------|-------------------------------|---------------------|
| sodium hydroxide | | | 2 mg/m ³ |

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 <u>undiluted</u> product:

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

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin

contact, the personal protection equipment as described in this section is not required.

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

Personal protective equipment

Eye / face protection: Safety glasses or goggles (AS/NZS 1337.1). The use of a full-face shield or other full-face

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

Hand protection: Chemical-resistant protective gloves (AS/NZS 2161.10). Verify instructions regarding permeability

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

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

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

thickness: ≥ 0.7 mm

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

Material thickness: ≥ 0.4 mm

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

be chosen.

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

occur (EN 14605).

Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or Respiratory protection:

aerosols should be avoided.

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

Recommended safety measures for handling the _diluted_product:

Recommended maximum concentration (% w/w): 14.53

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

Personal protective equipment

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

No special requirements under normal use conditions. **Environmental exposure controls:**

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Method / remark

Physical state: Liquid Colour: Pale , Yellow Odour: Slightly perfumed Odour threshold: Not applicable

pH: ≈ 12.9 (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): Not applicable. 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

Lower and upper explosion limit/flammability limit (%): Not determined

Vapour pressure: Not determined Relative vapour density Not determined

Relative density: ≈ 1.08 (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

OECD 109 (EU A.3)

Not relevant to classification of this product

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 releasing toxic chlorine gas. Keep away from acids.

10.6 Hazardous decomposition products

Chlorine.

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 toxicit

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|--|----------|----------------------|---------|-------------------|-------------------|
| sodium hypochlorite (active chlorine) | LD 50 | 1100 | Rat | OECD 401 (EU B.1) | 90 |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | |
| sodium hydroxide | | No data available | | | |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|--|----------|----------------------|---------|-------------------|-------------------|
| sodium hypochlorite (active chlorine) | LD 50 | > 20000 | Rabbit | OECD 402 (EU B.3) | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | |
| sodium hydroxide | LD 50 | 1350 | Rabbit | Method not given | |

Acute inhalative toxicity

| Acute Illinalative toxicity | | | | | | |
|--|----------|-----------------|---------|-------------------|----------|--|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | |
| | | (mg/l) | | | time (h) | |
| sodium hypochlorite (active chlorine) | LC 50 | > 10.5 (vapour) | Rat | OECD 403 (EU B.2) | 1 | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data | | | | |
| | | available | | | | |
| sodium hydroxide | | No data | | | | |
| · | | available | | | | |

Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|-------------------|---------------|
| sodium hypochlorite (active chlorine) | Corrosive | Rabbit | OECD 404 (EU B.4) | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |
| sodium hydroxide | Corrosive | Rabbit | Method not given | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|-------------------|---------------|
| sodium hypochlorite (active chlorine) | Severe damage | Rabbit | OECD 405 (EU B.5) | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |
| sodium hydroxide | Corrosive | Rabbit | Method not given | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| sodium hypochlorite (active chlorine) | Irritating to | | | |
| | respiratory tract | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |
| sodium hydroxide | No data available | | | |

SensitisationSensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|--|-------------------|------------|----------------------|-------------------|
| sodium hypochlorite (active chlorine) | Not sensitising | Guinea pig | OECD 406 (EU B.6) / | |
| | _ | | Buehler test | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |
| sodium hydroxide | Not sensitising | | Human repeated patch | |
| | | | test | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| sodium hypochlorite (active chlorine) | Not sensitising | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |
| sodium hydroxide | No data available | | | |

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Mutagenicity

| Ingredient(s) | Result (in-vitro) | Method | Result (in-vivo) | Method |
|--|--|-----------------|--|---------------|
| | | (in-vitro) | | (in-vivo) |
| sodium hypochlorite (active chlorine) | No evidence for mutagenicity | OECD 471 (EU | No evidence for mutagenicity, negative | OECD 474 (EU |
| | | B.12/13) | test results | B.12) |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | No data available | |
| sodium hydroxide | No evidence for mutagenicity, negative | DNA repair test | No evidence for mutagenicity, negative | OECD 474 (EU |
| | test results | on rat | test results | B.12) OECD |
| | | hepatocytes | | 475 (EU B.11) |
| | | OECD 473 | | |

Carcinogenicity

| out on reger next | | | |
|--|--|--|--|
| Ingredient(s) | Effect | | |
| sodium hypochlorite (active chlorine) | No evidence for carcinogenicity, negative test results | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | |
| sodium hydroxide | No evidence for carcinogenicity, weight-of-evidence | | |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|---|----------|---|-----------------------|---------|---|---------------|--|
| sodium hypochlorite (active chlorine) | NOAEL | Developmental toxicity Impaired fertility | 5 (CI) | Rat | OECD 414 (EU B.31), oral OECD 415 (EU B.34), oral | | No evidence for reproductive toxicity |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | | No data available | | | | |
| sodium hydroxide | | | No data available | | | | No evidence for developmental toxicity No evidence for reproductive toxicity |

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|--|----------|-----------------------|---------|-----------------------|----------------------|--------------------------------------|
| sodium hypochlorite (active chlorine) | NOAEL | 50 | Rat | OECD 408 (EU B.26) | 90 | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | | |
| sodium hydroxide | | No data available | | | | |

| Sub-chronic | dermal | toxicity |
|-------------|--------|----------|
| | | |

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Specific effects and organs |
|---------------|------------|--------|---------|-----------|----------|-----------------------------|
| ingredient(s) | Liiupoiiit | y aluc | Opecies | INICITIOU | Lyposuic | popecinic enects and organs |

| | (mg/kg bw/d) | | time (days) | affected |
|--|--------------|--|-------------|----------|
| sodium hypochlorite (active chlorine) | No data | | | |
| | available | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data | | | |
| | available | | | |
| sodium hydroxide | 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 |
| sodium hypochlorite (active chlorine) | | No data | | | | |
| | | available | | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data | | | | |
| · | | available | | | | |
| sodium hydroxide | | No data | | | | |
| - | | available | | | | |

Chronic toxicity

| Ingredient(s) | Exposure route | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time | Specific effects and organs affected | Remark |
|------------------------|----------------|----------|-----------------------|---------|--------|---------------|---|--------|
| sodium hypochlorite | | | No data | | | | | |
| (active chlorine) | | | available | | | | | |
| 1-Dodecanamine, | | | No data | | | | | |
| N,N-dimethyl-, N-oxide | | | available | | | | | |
| sodium hydroxide | | | No data | | | | | |
| | | | available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| sodium hypochlorite (active chlorine) | Not applicable |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available |
| sodium hydroxide | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| sodium hypochlorite (active chlorine) | Not applicable |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available |
| sodium hydroxide | No data available |

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

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

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

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

Aquatic short-term toxicity Aquatic short-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|----------|-------------------|------------------------|------------------|-------------------|
| sodium hypochlorite (active chlorine) | LC 50 | 0.06 | Oncorhynchus mykiss | Method not given | 96 |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | |
| sodium hydroxide | LC 50 | 35 | Various species | Method not given | 96 |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|----------|----------------------|-----------------------|-------------------|-------------------|
| sodium hypochlorite (active chlorine) | EC 50 | 0.035 | Ceriodaphnia dubia | OECD 202 (EU C.2) | 48 |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | Daphnia | | |

| sodium hydroxide | EC 50 | 40.4 | Ceriodaphnia | Method not given | 48 |
|------------------|-------|------|--------------|------------------|----|
| | | | sp. | | |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|----------|----------------------|-----------------------------------|------------------|-------------------|
| sodium hypochlorite (active chlorine) | NOEC | 0.0021 | Not specified | Method not given | 168 |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | |
| sodium hydroxide | EC 50 | 22 | Photobacteriu m phosphoreum | Method not given | 0.25 |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|--|----------|----------------------|--------------------------|------------------|----------------------|
| sodium hypochlorite (active chlorine) | EC 50 | 0.026 | Crassostrea virginica | Method not given | 2 |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | |
| sodium hydroxide | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|--|----------|----------------------|---------------------|------------------|---------------|
| sodium hypochlorite (active chlorine) | | 0.375 | Activated sludge | Method not given | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | |
| sodium hydroxide | | No data available | | | |

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

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|----------------------|-----------------------|------------------|---------------|------------------|
| sodium hypochlorite (active chlorine) | NOEC | 0.04 | Menidia pelinsulae | Method not given | 96 hour(s) | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | | |
| sodium hydroxide | | No data available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
|--|----------|-----------|-------------|------------|-----------|------------------|
| | | (mg/l) | | | time | |
| sodium hypochlorite (active chlorine) | NOEC | 0.007 | Crassostrea | Method not | 15 day(s) | |
| | | | virginica | given | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data | | _ | | |
| • | | available | | | | |
| sodium hydroxide | | No data | | | | |
| | | available | | | | |

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

| Aquatic toxicity to other aquatic benthic organisms, inclu | uing sealmen | t-uweiling organi | siris, ii avallable. | | | |
|--|--------------|-------------------|----------------------|--------|-------------|------------------|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
| • () | | (mg/kg dw | • | | time (days) | |
| | | sediment) | | | (uu, o, | |
| sodium hypochlorite (active chlorine) | | No data | | | | |
| | | available | | | | |
| sodium hydroxide | | No data | | | | |
| | | available | I | 1 | | |

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 |
|---|---------------------------------------|----------|-----------------------------|---------|--------|----------------------|------------------|
| Г | sodium hypochlorite (active chlorine) | | No data available | | | | |
| | sodium hydroxide | | No data available | | | | |

Terrestrial toxicity - plants, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
|---------------|----------|-------|---------|--------|----------|------------------|

| | (mg/kg dw soil) | | time (days) | |
|---------------------------------------|--------------------|--|-------------|--|
| sodium hypochlorite (active chlorine) | No data available | | | |
| sodium hydroxide | No data available | | | |

Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
|---------------------------------------|----------|-----------|---------|--------|----------------------|------------------|
| sodium hypochlorite (active chlorine) | | No data | | | | |
| | | available | | | | |
| sodium hydroxide | | No data | | | | |
| | | available | | | | |

Terrestrial toxicity - beneficial insects, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|---------------------------------------|----------|-----------------------------|---------|--------|----------------------|------------------|
| sodium hypochlorite (active chlorine) | | No data available | | | | |
| sodium hydroxide | | 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 hypochlorite (active chlorine) | | No data available | | | | |
| sodium hydroxide | | 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 |
|---------------------------------------|----------------|--------------------------|-------------------------|--------|
| sodium hypochlorite (active chlorine) | 115 day(s) | Indirect photo-oxidation | | |
| sodium hydroxide | 13 second(s) | Method not given | Rapidly photodegradable | |

Abiotic degradation - hydrolysis, if available:

| Ingredient(s) | Half-life time in fresh water | Method | Evaluation | Remark |
|---------------------------------------|----------------------------------|--------|------------|--------|
| sodium hypochlorite (active chlorine) | No data available | | | |
| sodium hydroxide | No data available | | | |

Abiotic degradation - other processes, if available:

| Ingredient(s) | Type | Half-life time | Method | Evaluation | Remark |
|---------------------|------|-------------------|--------|------------|--------|
| sodium hypochlorite | | No data available | | | |
| (active chlorine) | | | | | |
| sodium hydroxide | | No data available | | | |

BiodegradationReady biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT 50 | Method | Evaluation |
|--|----------|----------------------------|--------------------|-----------|--------------------------------------|
| sodium hypochlorite (active chlorine) | | | | | Not applicable (inorganic substance) |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | CO ₂ production | 95.2% in 28 day(s) | OECD 301B | Readily biodegradable |
| sodium hydroxide | | | | | Not applicable (inorganic substance) |

Ready biodegradability - anaerobic and marine conditions, if available:

| Ingredient(s) | Medium & Type | Analytical method | DT 50 | Method | Evaluation |
|---------------------------------------|---------------|-------------------|-------|--------|-------------------|
| sodium hypochlorite (active chlorine) | | | | | No data available |
| sodium hydroxide | | | | | No data available |

Degradation in relevant environmental compartments, if available:

| Ingredient(s) | Medium & Type | Analytical method | DT 50 | Method | Evaluation |
|---------------------------------------|---------------|-------------------|-------|--------|-------------------|
| sodium hypochlorite (active chlorine) | | | | | No data available |

| | | | |
|------------------|--|------|-------------------|
| sodium hydroxide | | | No data available |

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|---|-------------------|------------------|--------------------------------------|--------|
| sodium hypochlorite (active chlorine) | -3.42 | Method not given | No bioaccumulation expected | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |
| sodium hydroxide | No data available | | Not relevant, does not bioaccumulate | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|-------------------|---------|--------|------------|--------|
| sodium hypochlorite (active chlorine) | No data available | | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | | |
| sodium hydroxide | 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 |
|--|--------------------------------------|---|--------|-----------------------|-------------------------------------|
| sodium hypochlorite (active chlorine) | 1.12 | | | | High potential for mobility in soil |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | | |
| sodium hydroxide | No data available | | | | Mobile in soil |

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

Recommendation: Suitable cleaning agents: Dispose of observing national or local regulations.

Water, if necessary with cleaning agent.

SECTION 14: Transport information



ADG, IMO/IMDG, ICAO/IATA

14.1 UN number: 1760

14.2 UN proper shipping name:

Corrosive liquid, n.o.s. (sodium hydroxide, hypochlorite)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: III
14.5 Environmental hazards:

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.

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

Other relevant information:

Hazchem code: 2X

The product has been classified, labelled and packaged in accordance with the requirements of ADG7.7 Code 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

Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by National regulations

Safework Australia.

Classified as a Schedule 5 (S5) Poison using the criteria in the Standard for the Uniform Scheduling Poison schedule

of Medicines and Poisons (SUSMP).

Classification Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by

Safework Australia.

Australian Inventory of Industrial Chemicals: All components are listed on the inventory, or are Inventory listing(s)

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: MS31000120 Version: 1.3 Revision: 2022-12-17

Additional information:

Respirators: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

Work practices - solvents: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

Exposure standards - Time Weighted Average (TWA) or Workplace Exposure Standard (WES) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

Personal protective equipment guidelines: The recommendation for protective equipment contained within this report is provided as a quide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Health effects from exposure: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Safety Data Sheet which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations and acronyms:

- · DNEL Derived No Effect Limit
- AUH Non GHS hazard statement
- PNEC Predicted No Effect Concentration
- ATE Acute Toxicity Estimate
- LD50 Lethal Dose, 50% / Median Lethal dose
- LC50 Lethal Concentration, 50% / Median Lethal Concentration
- EC50 effective concentration, 50%
- NOEL No observed effect level
- · NOAEL No observed adverse effect level
- STOT-RE Specific target organ toxicity (repeated exposure)
 STOT-SE Specific target organ toxicity (single exposure)

- EC No. European Community Number
 OECD Organisation for Economic Cooperation and Development

End of Safety Data Sheet