

Safety Data Sheet

SUMA ELIMINEX J-FLEX

Revision: 2023-01-01 **Version:** 01.2

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SUMA ELIMINEX J-FLEX

1.2 Recommended use and restrictions on use

Identified uses: Drain cleaner

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 Corrosive to metals, Category 1 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.

H290 - May be corrosive to metals.

Prevention statement(s):

P233 - Keep container tightly closed.

P234 - Keep only in original packaging.

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. P390 - Absorb spillage to prevent material damage.

Storage statement(s):

P405 - Store locked up.
P406 - Store in corrosive-resistant container with a resistant inner liner.

Disposal statement(s):

P501 - Dispose of unused content as chemical waste.

2.3 Other hazards

2.4 Classification diluted product:

Recommended maximum concentration (% w/w): 5

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 |
| N,N-dimethyltetradecylamine N-oxide | 3332-27-2 | 222-059-3 | 1-3 |
| potassium hydroxide | 1310-58-3 | 215-181-3 | 1-3 |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | 1643-20-5 | 216-700-6 | 0.1-1 |

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

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information: If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery

position and seek medical advice. Provide fresh air. 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.

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

POISON CENTRE, doctor or physician.

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove Eye contact:

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. 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:

Eve 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.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original packaging. 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) | Long term value(s) (TWA) | Short term value(s) (STEL) | Peak value(s) |
|---------------------|-----------------------------|-------------------------------|---------------------|
| potassium 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: No special requirements under normal use conditions.

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.

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

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

occur (EN 14605).

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

aerosols should be avoided.

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 (% w/w): 5

Use only in well ventilated areas. Ensure that foam equipment does not generate respirable Appropriate engineering controls:

particles

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

Personal protective equipment

Safety glasses or goggles (AS/NZS 1337.1) are always recommended for foam applications. Eye / face protection: Hand protection: Chemical-resistant protective gloves (AS/NZS 2161.10) are always recommended for foam

applications. 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

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

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

Method / remark

Physical state: Liquid Colour: Hazy, Yellow

Odour: Chlorine

Odour threshold: Not applicable

pH: ≈ 12.7 (neat) Dilution pH: ≈ 11 (1%)

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 determined.

Flash point (°C): > 93.3 °C

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

Evaporation rate: Not determined

Flammability (solid, gas): Not determined

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

Relative vapour density Not determined Relative density: ~ Not determined (20 °C) Solubility in / Miscibility with water: Fully miscible

Partition coefficient: n-octanol/water No information available.

Not relevant to classification of this product

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: Corrosive

Weight of evidence

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): >5000

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) |
|--|----------|----------------------|---------|-------------------|-------------------|
| sodium hypochlorite (active chlorine) | LD 50 | 1100 | Rat | OECD 401 (EU B.1) | 90 |
| N,N-dimethyltetradecylamine N-oxide | LD 50 | > 300-2000 | Rat | OECD 401 (EU B.1) | |
| potassium hydroxide | LD 50 | 333 | Rat | OECD 425 | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | 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) | tille (II) |
| Sodium hypochionie (active chionne) | LD 50 | > 20000 | Rabbit | OECD 402 (EU B.3) | |
| N,N-dimethyltetradecylamine N-oxide | | No data | | | |
| | | available | | | |
| potassium hydroxide | | No data | | | |
| | | available | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data | | | |
| | | available | | | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---------------------------------------|----------|-----------------|---------|-------------------|-------------------|
| sodium hypochlorite (active chlorine) | LC 50 | > 10.5 (vapour) | Rat | OECD 403 (EU B.2) | 1 |

| N,N-dimethyltetradecylamine N-oxide | No data available |
|--|----------------------|
| potassium hydroxide | No data available |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | 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) | |
| N,N-dimethyltetradecylamine N-oxide | Irritant | Rabbit | OECD 404 (EU B.4) | |
| potassium hydroxide | Corrosive | Rabbit | Draize test | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |

Eye irritation and corrosivity

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

Respiratory tract irritation and corrosivity

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

Sensitisation Sensitisation 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 | |
| N,N-dimethyltetradecylamine N-oxide | No data available | | | |
| potassium hydroxide | Not sensitising | Guinea pig | Method not given | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |

Sensitisation by inhalation

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

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

| Mutagericity | | | | |
|--|---|------------------|--|--------------|
| 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) |
| N,N-dimethyltetradecylamine N-oxide | No data available | | No data available | |
| potassium hydroxide | No evidence for mutagenicity, negative test results | Method not given | No data available | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | No data available | |

| Sarcinogenicity | |
|--|--|
| Ingredient(s) | Effect |
| sodium hypochlorite (active chlorine) | No evidence for carcinogenicity, negative test results |
| N,N-dimethyltetradecylamine N-oxide | No data available |
| potassium hydroxide | No evidence for carcinogenicity, negative test results |
| 1-Dodecanamine, N.N-dimethyl-, N-oxide | No data available |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value | Species | Method | Exposure | Remarks and other effects |
|---------------|----------|-----------------|--------------|---------|--------|----------|---------------------------|
| | | · | (mg/kg bw/d) | | | time | 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 |
|---|-------|---|----------------------|-----|---|---------------------------------------|
| N,N-dimethyltetradecyl amine N-oxide | | | No data available | | | |
| potassium hydroxide | | | No data available | | | No evidence for reproductive toxicity |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | | No data available | | | |

Repeated dose toxicity

| Sub-acute | | |
|-----------|--|--|
| | | |
| | | |

| 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 | |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | | |
| potassium hydroxide | | No data available | | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | | |

Sub-chronic dermal toxicity

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

STOT-single exposure

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

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| sodium hypochlorite (active chlorine) | Not applicable |
| N,N-dimethyltetradecylamine N-oxide | No data available |
| potassium hydroxide | No data available |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | 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 symptomsEffects 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 |
| N,N-dimethyltetradecylamine N-oxide | LC 50 | 1-10 | Brachydanio rerio | OECD 203, semi-static | 96 |
| potassium hydroxide | LC 50 | 80 | Various species | Weight of evidence | 24 |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | |

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 |
| N,N-dimethyltetradecylamine N-oxide | EC 50 | > 1-10 | Daphnia magna Straus | OECD 202, static | 48 |
| potassium hydroxide | EC 50 | 30 - 1000 | Daphnia magna Straus | Weight of evidence | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | Daphnia | | |

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 |
| N,N-dimethyltetradecylamine N-oxide | EC 50 | 0.19 | Pseudokirchner iella subcapitata | Read across | 72 |
| potassium hydroxide | | No data available | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | |

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 |
| N,N-dimethyltetradecylamine N-oxide | | No data available | | | |
| potassium hydroxide | | No data available | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | 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 | |
| N,N-dimethyltetradecylamine N-oxide | EC 50 | 56 | Pseudomonas putida | DIN 38412 / Part 8 Read across | |
| potassium hydroxide | EC 50 | 22 | Photobacteriu m phosphoreum | Method not given | 15 minute(s) |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data | | | |

| | | | availa | ble | | |
|--|--|---|------------------|------------------|--|--|
| | | | | | | |
| atic long-term toxicity tic long-term toxicity - fish | | | | | | |
| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
| sodium hypochlorite (active chlorine) | NOEC | 0.04 | Menidia | Method not | 96 hour(s) | |
| N,N-dimethyltetradecylamine N-oxide | | No data | pelinsulae | given | | |
| potassium hydroxide | | available No data | | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | available No data | | | | |
| | | available | | | | |
| tic long-term toxicity - crustacea | | | | | | |
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
| sodium hypochlorite (active chlorine) | NOEC | (mg/l) 0.007 | Crassostrea | Method not | time 15 day(s) | |
| N,N-dimethyltetradecylamine N-oxide | | No data | virginica | given | | |
| potassium hydroxide | | available No data | | | | |
| | | available | | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | No data available | | | | |
| | | | | | | |
| tic toxicity to other aquatic benthic organisms, inc Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
| | | (mg/kg dw sediment) | | | time (days) | |
| sodium hypochlorite (active chlorine) | | No data available | | | | |
| potassium hydroxide | | No data | | | | |
| | | available | | | | |
| | | | | | | |
| and the second of the second o | | | | | | |
| estrial toxicity strial toxicity - soil invertebrates, including earthw | orms, if availabl | e: | | | | |
| estrial toxicity strial toxicity - soil invertebrates, including earthw Ingredient(s) | vorms, if availabl | Value | Species | Method | Exposure | Effects observed |
| strial toxicity - soil invertebrates, including earthw Ingredient(s) | | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
| sodium hypochlorite (active chlorine) | | Value (mg/kg dw soil) No data available | Species | Method | | Effects observed |
| strial toxicity - soil invertebrates, including earthw Ingredient(s) | | Value (mg/kg dw soil) No data | Species | Method | | Effects observed |
| strial toxicity - soil invertebrates, including earthw Ingredient(s) sodium hypochlorite (active chlorine) | | Value (mg/kg dw soil) No data available No data | Species | Method | | Effects observed |
| strial toxicity - soil invertebrates, including earthwing lingredient(s) sodium hypochlorite (active chlorine) potassium hydroxide strial toxicity - plants, if available: | Endpoint | Value (mg/kg dw soil) No data available No data available | | | time (days) | |
| strial toxicity - soil invertebrates, including earthwing lingredient(s) sodium hypochlorite (active chlorine) potassium hydroxide | | Value (mg/kg dw soil) No data available No data available Value (mg/kg dw | Species Species | Method Method | | |
| strial toxicity - soil invertebrates, including earthwing lingredient(s) sodium hypochlorite (active chlorine) potassium hydroxide strial toxicity - plants, if available: | Endpoint | Value (mg/kg dw soil) No data available No data available Value (mg/kg dw soil) No data | | | time (days) | |
| strial toxicity - soil invertebrates, including earthwing lingredient(s) sodium hypochlorite (active chlorine) potassium hydroxide strial toxicity - plants, if available: Ingredient(s) sodium hypochlorite (active chlorine) | Endpoint | Value (mg/kg dw soil) No data available No data available Value (mg/kg dw soil) No data available | | | time (days) | |
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| - 1 | notosojum hydrovido | No doto | | |
|-----|---------------------|-----------|--|--|
| | potassium 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 | | |
| potassium hydroxide | No data available | | | |

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

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

Biodegradation

Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT 50 | Method | Evaluation |
|--|--------------------------|----------------------------|------------------------|-----------|--------------------------------------|
| sodium hypochlorite (active chlorine) | | | | | Not applicable (inorganic substance) |
| N,N-dimethyltetradecylamine N-oxide | Activated sludge, aerobe | CO ₂ production | > 60 % in 28 day(s) | OECD 301B | Readily biodegradable |
| potassium hydroxide | | | | | Not applicable (inorganic substance) |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | | CO ₂ production | 95.2% in 28 day(s) | OECD 301B | Readily biodegradable |

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 |

Degradation in relevant environmental compartments, if available:

| Ingredient(s) | Medium & Type | Analytical method | DT 50 | Method | Evaluation |
|---------------------------------------|---------------|-------------------|-------|--------|-------------------|
| sodium hypochlorite (active chlorine) | | | | | No data available |
| potassium 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 | |
| N,N-dimethyltetradecylamine N-oxide | No data available | | No bioaccumulation expected | |
| potassium hydroxide | No data available | | Not relevant, does not bioaccumulate | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|-------------------|---------|--------|------------|--------|
| sodium hypochlorite (active chlorine) | No data available | | | | |
| N,N-dimethyltetradecyl amine N-oxide | No data available | | | | |
| potassium hydroxide | No data available | | | | |
| 1-Dodecanamine, N,N-dimethyl-, N-oxide | No data available | | | | |

12.4 Mobility in soil

| 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 |

| | N,N-dimethyltetradecylamine N-oxide | No data available | | |
|---|--|-------------------|--|--------------------------------------|
| | potassium hydroxide | No data available | | Low potential for adsorption to soil |
| - | 1-Dodecanamine, N,N-dimethyl-, N-oxide | 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

Recommendation: Dispose of observing national or local regulations. **Suitable cleaning agents:** Water, if necessary with cleaning agent.

SECTION 14: Transport information



ADG, IMO/IMDG, ICAO/IATA

14.1 UN number: 3266

14.2 UN proper shipping name:

Corrosive liquid, basic, inorganic, n.o.s. (potassium 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: Yes

Marine pollutant: Yes

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

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

Safework Australia.

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

of Medicines and Poisons (SUSMP).

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

Safework Australia.

Inventory listing(s)

Australian Inventory of Industrial Chemicals: All components are listed on the 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: MS31000423 **Version:** 01.2 **Revision:** 2023-01-01

Full text of the H phrases mentioned in section 3:

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 guide 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
- 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