

Safety Data Sheet

WIPEOUT J-FILL

Revision: 2018-04-24 **Version:** 01.1

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: WIPEOUT J-FILL

1.2 Recommended use and restrictions on use

Identified uses: Hard surface cleaner Restrictions of use:

Uses other than those identified are not recommended

1.3 Details of the supplier

Diversey Australia Pty. Limited 29 Chifley St, Smithfield, NSW, 2164, Australia Telephone: 1800 647 779 (toll free)

Fax: (02) 9725 5767

Email: aucustserv@diversey.com Website: www.diversey.com/

1.4 Emergency telephone number

Call 1800 033 111 (24hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids, Category 4 Skin corrosion, Category 1B Specific target organ toxicity (single exposure), Category 3

2.2 Label elements



Signal word: Danger Hazard statements:

H227 - Combustible liquid.

H314 - Causes severe skin burns and eye damage.

H335 - May cause respiratory irritation.

Prevention statement(s):

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P260 - Do not breathe vapours.

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

P271 - Use only outdoors or in a well-ventilated area.

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.

P370 + P378 - In case of fire: Use chemical powder to extinguish.

Storage statement(s):

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 - Store in a well-ventilated place. Keep cool.

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 (%): 7.7

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

| Ingredient(s) | CAS number | EC number | Weight |
|--|------------|-----------|---------|
| | | | percent |
| 2-butoxyethanol | 111-76-2 | 203-905-0 | 30-60 |
| propane-1,2-diol | 57-55-6 | 200-338-0 | 10-30 |
| 2-aminoethanol | 141-43-5 | 205-483-3 | 3-10 |
| Alcohols, C12-14, ethoxylated | 68439-50-9 | 500-213-3 | 3-10 |
| tetrapotassium ethylene diamine tetraacetate | 7379-27-3 | 230-943-5 | 3-10 |
| potassium hydroxide | 1310-58-3 | 215-181-3 | 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.

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information: Symptoms of intoxication may even occur after several hours. It is recommended to continue

medical observation for at least 48 hours after the incident. 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. Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if

you feel unwell.

Skin contact: Take off immediately all contaminated clothing and wash it before re-use. 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.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Do NOT induce varieting. Keep at rest, Immediately call a POISON CENTRE, doctor or

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 respiratory irritation.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

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

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.

Inhalation:

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

Turn off all sources of ignition. Ventilate the area. Ensure adequate ventilation. Do not breathe dust or vapour. 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

Use neutralising agent. 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:

Keep away from flames and hot surfaces. No smoking. Keep away from heat. Take precautionary measures against static discharges.

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 well-ventilated place. Store in a closed container. Keep only in original packaging. Keep cool. Keep away from heat and direct sunlight.

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) |
|---------------------|----------------------------------|-------------------------------|---------------------|
| 2-butoxyethanol | 20 ppm 96.9 mg/m ³ | 50 ppm 242 mg/m³ | |
| propane-1,2-diol | 150 ppm 474 mg/m³ 10 mg/m³ | | |
| 2-aminoethanol | 3 ppm 7.5 mg/m ³ | 6 ppm 15 mg/m³ | |
| 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: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166). 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 (EN 374). 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.

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 (%): 7.7

Appropriate engineering controls:

Appropriate organisational controls:

No special requirements under normal use conditions.

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.

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: Clear, Yellow - Green

Odour: Perfumed

Odour threshold: Not applicable

pH: ≈ 14 (neat) ISO 4316 **Dilution pH:** ≈ 12 (10%) ISO 4316

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

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

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

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

Vapour pressure: Not determined

Vapour density: Not determined Relative density: ≈ 1.020 (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. Vapours may form explosive mixtures with air.

Oxidising properties: Not oxidising

Not relevant to classification of this product

Not relevant to classification of this product

Not relevant to classification of this product

OECD 109 (EU A.3)

9.2 Other information

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

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

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000 ´
ATE - Dermal (mg/kg): >2000
ATE - Inhalatory, mists (mg/l): >5
ATE - Inhalatory, vapours (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) |
|--|----------|----------------------|---------|-------------------|-------------------|
| 2-butoxyethanol | LD 50 | 1746 | Rat | Method not given | |
| propane-1,2-diol | LD 50 | > 10000 | Rat | Method not given | |
| 2-aminoethanol | LD 50 | 1515 | Rat | OECD 401 (EU B.1) | |
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | |
| potassium hydroxide | LD 50 | 333 | Rat | OECD 425 | |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|--|----------|----------------------|---------|------------------|-------------------|
| 2-butoxyethanol | LD 50 | 6411 | | Method not given | |
| propane-1,2-diol | LD 50 | > 2000 | Rabbit | Method not given | |
| 2-aminoethanol | LD 50 | 1025 | Rabbit | Method not given | |
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | |
| potassium hydroxide | | No data available | | | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|------------------|----------|--|---------|--------------------|-------------------|
| 2-butoxyethanol | LC 50 | > 2 (mist) | Rat | Method not given | 4 |
| propane-1,2-diol | LC 50 | > 317 (mist) No mortality observed | Rabbit | Non guideline test | |
| 2-aminoethanol | | No mortality observed | Rat | Non guideline test | 6 |

| Alcohols, C12-14, ethoxylated | No data available | |
|--|----------------------|--|
| tetrapotassium ethylene diamine tetraacetate | No data available | |
| potassium hydroxide | No data available | |

Irritation and corrosivity Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|-------------------|---------------|
| 2-butoxyethanol | Irritant | Rabbit | Method not given | |
| propane-1,2-diol | Not irritant | Rabbit | OECD 404 (EU B.4) | |
| 2-aminoethanol | Corrosive | Rabbit | OECD 404 (EU B.4) | |
| Alcohols, C12-14, ethoxylated | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | No data available | | | |
| potassium hydroxide | Corrosive | Rabbit | Draize test | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|------------------------------|---------|-------------------|---------------|
| 2-butoxyethanol | Irritant | Rabbit | OECD 405 (EU B.5) | |
| propane-1,2-diol | Not corrosive or irritant | Rabbit | OECD 405 (EU B.5) | |
| 2-aminoethanol | Severe damage | Rabbit | OECD 405 (EU B.5) | |
| Alcohols, C12-14, ethoxylated | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | No data available | | | |
| potassium hydroxide | Corrosive | Rabbit | Method not given | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|---------------------------------|---------|------------------|---------------|
| 2-butoxyethanol | No data available | | | |
| propane-1,2-diol | No data available | | | |
| 2-aminoethanol | Irritating to respiratory tract | | Method not given | |
| Alcohols, C12-14, ethoxylated | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | No data available | | | |
| potassium hydroxide | No data available | | | |

SensitisationSensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|--|-------------------|------------|-----------------------------|-------------------|
| 2-butoxyethanol | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| propane-1,2-diol | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| 2-aminoethanol | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| Alcohols, C12-14, ethoxylated | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | No data available | | | |
| potassium hydroxide | Not sensitising | Guinea pig | Method not given | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| 2-butoxyethanol | No data available | | | |
| propane-1,2-diol | No data available | | | |
| 2-aminoethanol | No data available | | | |
| Alcohols, C12-14, ethoxylated | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | No data available | | | |
| potassium 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) |
| 2-butoxyethanol | No evidence for mutagenicity, negative | OECD 471 (EU | No data available | |
| | test results | B.12/13) | | |
| propane-1,2-diol | No evidence for mutagenicity, negative | Method not | No data available | |
| · | test results | given | | |
| 2-aminoethanol | No evidence for mutagenicity, negative | OECD 471 (EU | No evidence for mutagenicity, negative | OECD 474 (EU |
| | test results | B.12/13) OECD | test results | B.12) |
| | | 473 OECD 476 | | |
| | | (Mouse | | |
| | | lymphoma) | | |
| Alcohols, C12-14, ethoxylated | No data available | | No data available | |

| tetrapotassium ethylene diamine tetraacetate | No data available | | No data available | |
|--|--|------------|-------------------|--|
| | | | | |
| potassium hydroxide | No evidence for mutagenicity, negative | Method not | No data available | |
| , , | toot roculto | givon | | |
| | test results | given | | |

Carcinogenicity

| Ingredient(s) | Effect |
|--|--|
| 2-butoxyethanol | No evidence for carcinogenicity, negative test results |
| propane-1,2-diol | No evidence for carcinogenicity, negative test results |
| 2-aminoethanol | No evidence for carcinogenicity, weight-of-evidence |
| Alcohols, C12-14, ethoxylated | No data available |
| tetrapotassium ethylene diamine tetraacetate | No data available |
| potassium hydroxide | No evidence for carcinogenicity, negative test results |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|---|----------|------------------------|-----------------------|---------|--------------------------------|---------------|--|
| 2-butoxyethanol | | | No data available | | | | |
| propane-1,2-diol | | | No data available | | | | No evidence for reproductive toxicity |
| 2-aminoethanol | NOAEL | Developmental toxicity | > 75 | Rabbit | OECD 414 (EU B.31), oral | | No evidence for developmental toxicity No evidence for reproductive toxicity |
| Alcohols, C12-14, ethoxylated | | | No data available | | | | |
| tetrapotassium ethylene diamine tetraacetate | | | No data available | | | | |
| potassium hydroxide | | | No data available | | | | 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 |
|--|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| 2-butoxyethanol | | No data available | | | | |
| propane-1,2-diol | | No data available | | | | |
| 2-aminoethanol | NOAEL | 300 | Rat | | 75 | |
| Alcohols, C12-14, ethoxylated | | No data available | | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | | |
| potassium hydroxide | | No data available | | | | |

Sub-chronic dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|--|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| 2-butoxyethanol | | No data available | | | | |
| propane-1,2-diol | | No data available | | | | |
| 2-aminoethanol | | No data available | | | | |
| Alcohols, C12-14, ethoxylated | | No data available | | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | | |
| potassium hydroxide | | 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 |
|--|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| 2-butoxyethanol | | No data available | | | | |
| propane-1,2-diol | | No data available | | | | |
| 2-aminoethanol | | No data available | | | | |
| Alcohols, C12-14, ethoxylated | | No data available | | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | | |
| potassium 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 |
|---|----------------|----------|-----------------------|---------|--------|---------------|---|--------|
| 2-butoxyethanol | | | No data available | | | | | |
| propane-1,2-diol | | | No data available | | | | | |
| 2-aminoethanol | | | No data available | | | | | |
| Alcohols, C12-14, ethoxylated | | | No data available | | | | | |
| tetrapotassium ethylene diamine tetraacetate | | | No data available | | | | | |
| potassium hydroxide | | | No data available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| 2-butoxyethanol | No data available |
| propane-1,2-diol | No data available |
| 2-aminoethanol | No data available |
| Alcohols, C12-14, ethoxylated | No data available |
| tetrapotassium ethylene diamine tetraacetate | No data available |
| potassium hydroxide | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|--|-------------------|
| 2-butoxyethanol | No data available |
| propane-1,2-diol | No data available |
| 2-aminoethanol | No data available |
| Alcohols, C12-14, ethoxylated | No data available |
| tetrapotassium ethylene diamine tetraacetate | No data available |
| potassium 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) |
|--|----------|----------------------|--------------------|-------------------|-------------------|
| 2-butoxyethanol | LC 50 | > 100 | Fish | Method not given | 96 |
| propane-1,2-diol | LC 50 | > 1000 | Fish | Method not given | 24 |
| 2-aminoethanol | LC 50 | 349 | Cyprinus carpio | OECD 203 (EU C.1) | 96 |
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | |
| potassium hydroxide | LC 50 | 80 | Various species | Method not given | 24 |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|----------|----------------------|-------------------------|------------------|-------------------|
| 2-butoxyethanol | EC 50 | > 100 | Daphnia magna Straus | Method not given | 24 |
| propane-1,2-diol | EC 50 | > 100 | Daphnia | Method not given | 48 |
| 2-aminoethanol | EC 50 | 65 | Daphnia magna Straus | OECD 202, static | 48 |
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | |
| potassium hydroxide | EC 50 | 30 - 1000 | Daphnia | Method not given | - |

magna Straus

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|--|----------|----------------------|--|-------------------|-------------------|
| 2-butoxyethanol | EC 50 | > 100 | Not specified | Method not given | 168 |
| propane-1,2-diol | EC 50 | 24200 | Desmodesmus subspicatus | OECD 201 (EU C.3) | 72 |
| 2-aminoethanol | NOEC | 1 | Pseudokirchner iella subcapitata | OECD 201 (EU C.3) | 72 |
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | |
| potassium hydroxide | | No data available | | | - |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|--|----------|----------------------|---------|--------|----------------------|
| 2-butoxyethanol | | No data available | | | - |
| propane-1,2-diol | | No data available | | | - |
| 2-aminoethanol | | No data available | | | - |
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | |
| potassium hydroxide | | No data available | | | - |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|--|----------|----------------------|-----------------------------------|---|-----------------|
| 2-butoxyethanol | EC o | 700 | Pseudomonas putida | Method not given | 16 hour(s) |
| propane-1,2-diol | EC o | > 20000 | Pseudomonas putida | Method not given | 18 hour(s) |
| 2-aminoethanol | EC 50 | > 1000 | Activated sludge | DIN EN ISO 8192-OECD 209-88/302/EEC | 3 hour(s) |
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | |
| potassium hydroxide | EC 50 | 22 | Photobacteriu m phosphoreum | Method not given | 15 minute(s) |

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

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|----------------------|-----------------|----------|---------------|------------------|
| 2-butoxyethanol | | No data available | | | | |
| propane-1,2-diol | | No data available | | | | |
| 2-aminoethanol | NOEC | 1.2 | Oryzias latipes | OECD 210 | 30 day(s) | |
| Alcohols, C12-14, ethoxylated | | No data available | | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | | |
| potassium hydroxide | | No data available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|--|----------|----------------------|-----------------------|------------------|---------------|------------------|
| 2-butoxyethanol | | No data available | | | | |
| propane-1,2-diol | NOEC | 13020 | Ceriodaphnia dubia | Method not given | 7 day(s) | |
| 2-aminoethanol | NOEC | 0.85 | Daphnia magna | OECD 211 | 21 day(s) | |
| Alcohols, C12-14, ethoxylated | | No data available | | | | |
| tetrapotassium ethylene diamine tetraacetate | | No data available | | | | |

| | No data available | | | | |
|----------|---------------------------------|--|---|---|---|
| | | | | | |
| Endpoint | Value (mg/kg dw sediment) | Species | Method | Exposure time (days) | Effects observed |
| | No data available | | | - | |
| | No data available | | | - | |
| | No data available | | | - | |
| | No data available | | | | |
| | No data available | | | | |
| | ling sediment | available Ing sediment-dwelling organis Endpoint Value (mg/kg dw sediment) No data available No data | available ling sediment-dwelling organisms, if available: Endpoint Value (mg/kg dw sediment) No data available No data | available ling sediment-dwelling organisms, if available: Endpoint Value (mg/kg dw sediment) No data available No data | available ling sediment-dwelling organisms, if available: Endpoint Value (mg/kg dw sediment) No data available No data |

Terrestrial toxicityTerrestrial toxicity - soil invertebrates, including earthworms, if available:

potassium hydroxide

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

No data available

Terrestrial toxicity - plants, if available:

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

Terrestrial toxicity - birds, if available:

| Terrestrial toxicity birds, il available. | | | | | | |
|---|----------|----------------------|---------|--------|----------------------|------------------|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
| 2-butoxyethanol | | No data available | | | = | |
| propane-1,2-diol | | No data available | | | - | |
| 2-aminoethanol | | No data available | | | - | |
| potassium 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 |
|---------------------|----------|-----------------------------|---------|--------|----------------------|------------------|
| 2-butoxyethanol | | No data available | | | - | |
| propane-1,2-diol | | No data available | | | - | |
| 2-aminoethanol | | No data available | | | - | |
| potassium 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 |
|------------------|----------|-----------------------------|---------|--------|----------------------|------------------|
| 2-butoxyethanol | | No data available | | | - | |
| propane-1,2-diol | | No data available | | | - | |
| 2-aminoethanol | | No data available | | | - | |

| potassium hydroxide | No data | | - | |
|---------------------|-----------|--|---|--|
| | available | | | |

12.2 Persistence and degradability

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

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT 50 | Method | Evaluation |
|--|----------|-------------------|------------------------|-----------|--------------------------------------|
| 2-butoxyethanol | | | 100 % in 28 day(s) | OECD 301B | Readily biodegradable |
| propane-1,2-diol | | | > 70 % in 28 day(s) | OECD 301A | Readily biodegradable |
| 2-aminoethanol | | DOC reduction | > 90 % in 21 day(s) | OECD 301A | Readily biodegradable |
| Alcohols, C12-14, ethoxylated | | | | OECD 301F | Readily biodegradable |
| tetrapotassium ethylene diamine tetraacetate | | | | | No data available |
| potassium hydroxide | | | | | Not applicable (inorganic substance) |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|--|-------------------|------------------|--------------------------------------|--------|
| 2-butoxyethanol | 0.81 | OECD 107 | No bioaccumulation expected | |
| propane-1,2-diol | -1.07 | Method not given | No bioaccumulation expected | |
| 2-aminoethanol | - 1.91 | OECD 107 | No bioaccumulation expected | |
| Alcohols, C12-14, ethoxylated | No data available | | | |
| tetrapotassium ethylene diamine tetraacetate | No data available | | | |
| potassium hydroxide | No data available | | Not relevant, does not bioaccumulate | _ |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|-------------------|---------|--------|------------|--------|
| 2-butoxyethanol | No data available | | | | |
| propane-1,2-diol | No data available | | | | |
| 2-aminoethanol | No data available | | | | |
| Alcohols, C12-14, ethoxylated | No data available | | | | |
| tetrapotassium ethylene diamine tetraacetate | No data available | | | | |
| potassium hydroxide | No data available | | | | |

12.4 Mobility in soil

| Ingredient(s) | Adsorption coefficient Log Koc | Desorption coefficient Log Koc(des) | Method | Soil/sediment type | Evaluation |
|--|--------------------------------------|---|-------------------|-----------------------|--|
| 2-butoxyethanol | No data available | | | | Potential for mobility in soil, soluble in water |
| propane-1,2-diol | No data available | | | | Potential for mobility in soil, soluble in water |
| 2-aminoethanol | 0.067 | | Model calculation | | Potential for mobility in soil, soluble in water Adsorption to solid soil phase is not expected |
| Alcohols, C12-14, ethoxylated | No data available | | | | |
| tetrapotassium ethylene diamine tetraacetate | No data available | | | | |
| potassium hydroxide | No data available | | | | Low potential for adsorption to 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: 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: 1760 14.2 UN proper shipping name:

Corrosive liquid, n.o.s. (potassium hydroxide, ethanolamine)

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 ADG 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) AICS (Australian Inventory of Chemical Substances): All components are listed on AICS, 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

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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 GHS Specific 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 Organization for Economic Cooperation and Development

End of Safety Data Sheet