

Safety Data Sheet

Liquid Pyroneg

Revision: 2022-12-21 **Version:** 01.1

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: Liquid Pyroneg

1.2 Recommended use and restrictions on use

Identified uses:

Cleaning of medical instruments in ultrasonic and washer disinfectors and for manual cleaning.

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:

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.

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): 0.4

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

| Ingredient(s) | CAS# | EC number | Weight percent |
|----------------------------------|------------|-----------|----------------|
| Alcohols, C12-14, ethoxylated | 68439-50-9 | 500-213-3 | 3-10 |
| potassium alkylbenzenesulphonate | 85480-57-5 | 287-337-9 | 1-3 |
| potassium hydroxide | 1310-58-3 | 215-181-3 | 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.

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. Get medical attention or advice if

you 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.

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: No known effects or symptoms in normal use.

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.

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

2R

2 - Fine water spray.

R - Liquid-tight chemical protective clothing and breathing apparatus. Dilute.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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).

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. 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. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling

with automatic systems. Use tools for manual handling of product. **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.

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: \geq 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: If exposure to liquid particles or splashes cannot be avoided use: half mask (EN 140) with particle

filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. Specific applications tools may be available to limit

exposure. Please refer to the product information sheet for the possibilities.

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): 0.4

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: Safety glasses are not normally required. However, their use is recommended in those cases where

splashes may occur when handling the product (EN 166).

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

Body protection:No special requirements under normal use conditions
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 , Purple
Odour: Product specific

Odour threshold: Not applicable

pH: > 12 (neat) **Dilution pH**: > 11 (1%)

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

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

Not relevant to classification of this product

Flammability (liquid): 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 determined

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

Vapour pressure: Not determined Relative vapour density Not determined Relative density: ≈ 1.04 (20 °C)

Solubility in / Miscibility with water: Fully miscible

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

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Autoignition temperature: Not determined **Decomposition temperature:** Not applicable.

Not relevant to classification of this product

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.

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): >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) |
|----------------------------------|----------|----------------------|---------|----------|-------------------|
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| potassium alkylbenzenesulphonate | | 1080 | | | |
| potassium hydroxide | LD 50 | 333 | Rat | OECD 425 | |

Acute dermal toxicity

| redic definal toxicity | | | | | |
|----------------------------------|----------|----------------------|---------|--------|-------------------|
| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| potassium alkylbenzenesulphonate | | No data available | | | |
| potassium hydroxide | | No data available | | | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|----------------------------------|----------|-----------------|---------|--------|-------------------|
| Alcohols, C12-14, ethoxylated | | No data | | | |
| | | available | | | |
| potassium alkylbenzenesulphonate | | No data | | | |
| | | available | | | |
| potassium hydroxide | | No data | | | |
| | | available | | | |

Irritation and corrosivity Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|----------------------------------|-------------------|---------|-------------|---------------|
| Alcohols, C12-14, ethoxylated | No data available | | | |
| potassium alkylbenzenesulphonate | No data available | | | |
| potassium hydroxide | Corrosive | Rabbit | Draize test | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|----------------------------------|-------------------|---------|------------------|---------------|
| Alcohols, C12-14, ethoxylated | No data available | | | |
| potassium alkylbenzenesulphonate | No data available | | | |
| potassium hydroxide | Corrosive | Rabbit | Method not given | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|----------------------------------|-------------------|---------|--------|---------------|
| Alcohols, C12-14, ethoxylated | No data available | | | |
| potassium alkylbenzenesulphonate | No data available | | | |
| potassium hydroxide | No data available | | | |

SensitisationSensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|----------------------------------|-------------------|------------|------------------|-------------------|
| Alcohols, C12-14, ethoxylated | No data available | | | |
| potassium alkylbenzenesulphonate | No data available | | | |
| potassium hydroxide | Not sensitising | Guinea pig | Method not given | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|----------------------------------|-------------------|---------|--------|---------------|
| Alcohols, C12-14, ethoxylated | No data available | | | |
| potassium alkylbenzenesulphonate | No data available | | | |
| potassium hydroxide | No data available | | | |

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

| Ingredient(s) | Result (in-vitro) | Method (in-vitro) | Result (in-vivo) | Method (in-vivo) |
|----------------------------------|---|----------------------|-------------------|---------------------|
| Alcohols, C12-14, ethoxylated | No data available | | No data available | |
| potassium alkylbenzenesulphonate | No data available | | No data available | |
| potassium hydroxide | No evidence for mutagenicity, negative test results | Method not given | No data available | |

Carcinogenicity

| Ingredient(s) | Effect |
|----------------------------------|--|
| Alcohols, C12-14, ethoxylated | No data available |
| potassium alkylbenzenesulphonate | 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 |
|---|----------|-----------------|-----------------------|---------|--------|---------------|---------------------------------------|
| Alcohols, C12-14, ethoxylated | | | No data available | | | | |
| potassium alkylbenzenesulphonat e | | | 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 |
|----------------------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| Alcohols, C12-14, ethoxylated | | No data | | | | |
| | | available | | | | |
| potassium alkylbenzenesulphonate | | 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 |
|----------------------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| Alcohols, C12-14, ethoxylated | | No data | | | | |
| | | available | | | | |
| potassium alkylbenzenesulphonate | | No data | | | | |
| | | available | | | | |
| potassium 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 |
| Alcohols, C12-14, ethoxylated | | No data | | | | |
| · · | | available | | | | |
| potassium alkylbenzenesulphonate | | 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 |
|---|----------------|----------|-----------------------|---------|--------|---------------|---|--------|
| Alcohols, C12-14, ethoxylated | | | No data available | | | | | |
| potassium alkylbenzenesulphonat e | | | No data available | | | | | |
| potassium hydroxide | | | No data available | | | | | |

STOT-single exposure

| erer engle expectate | |
|----------------------------------|-------------------|
| Ingredient(s) | Affected organ(s) |
| Alcohols, C12-14, ethoxylated | No data available |
| potassium alkylbenzenesulphonate | No data available |
| potassium hydroxide | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|----------------------------------|-------------------|
| Alcohols, C12-14, ethoxylated | No data available |
| potassium alkylbenzenesulphonate | 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

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|----------------------------------|----------|----------------------|--------------------|--------------------|-------------------|
| Alcohols, C12-14, ethoxylated | | No data available | | | |
| potassium alkylbenzenesulphonate | | No data available | | | |
| potassium hydroxide | LC 50 | 80 | Various species | Weight of evidence | 24 |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | ı |
|---------------|----------|-------|---------|--------|----------|---|
| | | | | | | |

| | | (mg/l) | | | time (h) |
|----------------------------------|-------|-----------|--------------|--------------------|----------|
| Alcohols, C12-14, ethoxylated | | No data | | | |
| | | available | | | |
| potassium alkylbenzenesulphonate | | No data | | | |
| | | available | | | |
| potassium hydroxide | EC 50 | 30 - 1000 | Daphnia | Weight of evidence | |
| | | | magna Straus | - | |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure |
|----------------------------------|----------|-----------|---------|--------|----------|
| | | (mg/l) | | | time (h) |
| Alcohols, C12-14, ethoxylated | | No data | | | |
| | | available | | | |
| potassium alkylbenzenesulphonate | | 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) |
|----------------------------------|----------|-----------------|---------|--------|----------------------|
| Alcohols, C12-14, ethoxylated | | No data | | | |
| | | available | | | |
| potassium alkylbenzenesulphonate | | 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 |
|----------------------------------|----------|-----------------|---------------|------------------|---------------|
| Alcohols, C12-14, ethoxylated | | No data | | | |
| | | available | | | |
| potassium alkylbenzenesulphonate | | No data | | | |
| , , , | | available | | | |
| potassium hydroxide | EC 50 | 22 | Photobacteriu | Method not given | 15 |
| | | | m | | minute(s) |
| | | | phosphoreum | | |

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

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|----------------------------------|----------|----------------------|---------|--------|---------------|------------------|
| Alcohols, C12-14, ethoxylated | | No data available | | | | |
| potassium alkylbenzenesulphonate | | 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 |
|----------------------------------|----------|-----------------|---------|--------|---------------|------------------|
| | | | | | une | |
| Alcohols, C12-14, ethoxylated | | No data | | | | |
| | | available | | | | |
| potassium alkylbenzenesulphonate | | No data | | | | |
| | | available | | | | |
| potassium hydroxide | | No data | | | | |
| · | | available | | | | |

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

| Ingredient(s) | Ingredient(s) Endpoint Value Species Method Exposure Effects obse | | | | | | |
|---------------------|---|------------------------|--|--|-------------|--|--|
| | | (mg/kg dw sediment) | | | time (days) | | |
| potassium hydroxide | | No data | | | | | |
| | | available | | | | | |

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

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

Terrestrial toxicity - plants, if available:

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

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

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

12.2 Persistence and degradability

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

| who to degradation photodegradation in all, it available. | | | | | | | | | |
|---|-------------------|--------|------------|--------|--|--|--|--|--|
| Ingredient(s) | Half-life time | Method | Evaluation | Remark | | | | | |
| potassium hydroxide | No data available | | | | | | | | |

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

| Ingredient(s) | Type | Half-life time | Method | Evaluation | Remark |
|---------------------|------|-------------------|--------|------------|--------|
| potassium hydroxide | | No data available | | | |

BiodegradationReady biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT 50 | Method | Evaluation |
|----------------------------------|--------------------------|----------------------------|---------------------------|------------------------------------|--------------------------------------|
| Alcohols, C12-14, ethoxylated | | | | OECD 301F | Readily biodegradable |
| potassium alkylbenzenesulphonate | Activated sludge, aerobe | CO ₂ production | > 89% 89% in 29 day(s) | Weight of evidence OECD 301B | Readily biodegradable |
| potassium hydroxide | | | | | Not applicable (inorganic substance) |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments if available:

| Degradation in relevant environmental compartments, if available. | | | | | | |
|---|---------------|-------------------|-------|--------|-------------------|--|
| Ingredient(s) | Medium & Type | Analytical method | DT 50 | Method | Evaluation | |
| potassium hydroxide | | | | | No data available | |

12.3 Bioaccumulative potential

| Ingredient(s) | Value | Method | Evaluation | Remark |
|----------------------------------|-------------------|--------|--------------------------------------|--------|
| Alcohols, C12-14, ethoxylated | No data available | | | |
| potassium alkylbenzenesulphonate | No data available | | | |
| potassium hydroxide | No data available | | Not relevant, does not bioaccumulate | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|-------------------|---------|--------|------------|--------|
| Alcohols, C12-14, ethoxylated | No data available | | | | |
| potassium alkylbenzenesulphonat e | No data available | | | | |
| potassium 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 |
|----------------------------------|--------------------------------------|---|--------|-----------------------|--------------------------------------|
| Alcohols, C12-14, ethoxylated | No data available | | | | |
| potassium alkylbenzenesulphonate | 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: 1814

14.2 UN proper shipping name:

Potassium hydroxide solution 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: 2R

IMO/IMDG

EmS: F-A, S-B

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

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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