

Safety Data Sheet

BREAK UP J-FILL D3.5 CONC

Revision: 2018-02-02

Version: 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: BREAK UP J-FILL D3.5 CONC

1.2 Recommended use and restrictions on use Identified uses: Degreaser 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 Skin corrosion, Category 1B

Corrosive to metals, 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.
- 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 (%): 0.826

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
tetrapotassium pyrophosphate	7320-34-5	230-785-7	10-30
potassium hydroxide	1310-58-3	215-181-3	3-10
disodium trisilicate	1344-09-8	215-687-4	1-3
Sulfonic acids, petroleum, sodium salts	68608-26-4	271-781-5	1-3
1-Dodecanamine, N,N-dimethyl-, N-oxide	1643-20-5	216-700-6	1-3

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

* 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 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 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 e	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 (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:	No special requirements under normal use conditions.
Environmental exposure controls:	Should not reach sewage water or drainage ditch undiluted or unneutralised.
Recommended safety measures for hand	dling the <u>diluted</u> product:
Recommended maximum concentration	on (%): 0.826
Appropriate engineering controls: Appropriate organisational controls:	Ensure that foam equipment does not generate respirable particles. No special requirements under normal use conditions.
Personal protective equipment	
Eye / face protection:	Safety glasses or goggles (EN 166) are always recommended for foam applications.
Hand protection:	Chemical-resistant protective gloves (EN 374) 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.
Body protection:	No special requirements under normal use conditions.
Respiratory protection:	No special requirements under normal use conditions.

No special requirements under normal use conditions.

Environmental exposure controls:

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Method / remark Physical State: Liquid Colour: Clear, Pale Yellow Odour: Product specific Odour threshold: Not applicable **pH:** > 13 (neat) Melting point/freezing point (°C): Not determined Not relevant to classification of this product **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 determined Upper/lower flammability limit (%): Not determined Vapour pressure: Not determined Vapour density: Not determined Relative density: ≈ 1.22 (20 °C) Solubility in / Miscibility with Water: Fully miscible Partition coefficient: n-octanol/water No information available. Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3 Autoignition temperature: Not determined Decomposition temperature: Not applicable. Viscosity: Not determined Explosive properties: Not explosive. Oxidising properties: Not oxidising

9.2 Other information Surface tension (N/m): Not determined Corrosion to metals: 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)
tetrapotassium pyrophosphate	LD 50	> 2000	Rat	Method not given	
potassium hydroxide	LD 50	333	Rat	OECD 425	
disodium trisilicate	LD 50	3400	Rat	Method not given	
Sulfonic acids, petroleum, sodium salts		No data available			
1-Dodecanamine, N,N-dimethyl-, N-oxide		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
tetrapotassium pyrophosphate	LD 50	> 2000	Rabbit	Method not given	
potassium hydroxide		No data available			
disodium trisilicate	LD 50	> 5000	Rat	Method not given	
Sulfonic acids, petroleum, sodium salts		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)
tetrapotassium pyrophosphate	LC 50	> 1.1	Rat	Method not given	4
potassium hydroxide		No data available			
disodium trisilicate	LC 50	> 2.06	Rat	Method not given	
Sulfonic acids, petroleum, sodium salts		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
tetrapotassium pyrophosphate	Not irritant		Method not given	
potassium hydroxide	Corrosive	Rabbit	Draize test	
disodium trisilicate	Irritant		Method not given	
Sulfonic acids, petroleum, sodium salts	No data available			
1-Dodecanamine, N,N-dimethyl-, N-oxide	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrapotassium pyrophosphate	Irritant		Method not given	
potassium hydroxide	Corrosive		Method not given	
disodium trisilicate	Irritant		Method not given	
Sulfonic acids, petroleum, sodium salts	No data available			
1-Dodecanamine, N,N-dimethyl-, N-oxide	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrapotassium pyrophosphate	No data available			
potassium hydroxide	No data available			
disodium trisilicate	Irritating to respiratory tract		Method not given	
Sulfonic acids, petroleum, sodium salts	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)
tetrapotassium pyrophosphate	Not sensitising		Method not given	
potassium hydroxide	Not sensitising	Guinea pig	Method not given	
disodium trisilicate	Not sensitising		Method not given	
Sulfonic acids, petroleum, sodium salts	No data available			
1-Dodecanamine, N,N-dimethyl-, N-oxide	No data available			

ensitisation by inhalation Ingredient(s)	Result	Species	Method	Exposure time
tetrapotassium pyrophosphate	No data available	0,00000	motriou	
potassium hydroxide	No data available			
disodium trisilicate	No data available			
Sulfonic acids, petroleum, sodium salts	No data available			
1-Dodecanamine, N,N-dimethyl-, N-oxide	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
tetrapotassium pyrophosphate	No data available		No data available	
potassium hydroxide	No evidence for mutagenicity, negative test results	Method not given	No data available	
disodium trisilicate	No evidence for mutagenicity, negative test results		No data available	
Sulfonic acids, petroleum, sodium salts	No data available		No data available	
1-Dodecanamine, N,N-dimethyl-, N-oxide	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
tetrapotassium pyrophosphate	No data available
potassium hydroxide	No evidence for carcinogenicity, negative test results
disodium trisilicate	No evidence for carcinogenicity, negative test results
Sulfonic acids, petroleum, sodium salts	No data available
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
tetrapotassium			No data				
pyrophosphate			available				
potassium hydroxide			No data				No evidence for reproductive
			available				toxicity
disodium trisilicate			No data				No evidence for reproductive
			available				toxicity
Sulfonic acids,			No data				
petroleum, sodium salts			available				
1-Dodecanamine,			No data				
N,N-dimethyl-, N-oxide			available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
	-	(mg/kg bw/d)	-		time (days)	affected

tetrapotassium pyrophosphate	NOAEL	No data	Rat	OECD 408 (EU	90 days	
		available		B.26)		
potassium hydroxide		No data				
		available				
disodium trisilicate	NOAEL	> 159	Rat	Method not		
				given		
Sulfonic acids, petroleum, sodium salts		No data				
·		available				
1-Dodecanamine, N,N-dimethyl-, N-oxide		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
tetrapotassium pyrophosphate		No data available				
potassium hydroxide		No data available				
disodium trisilicate		No data available				
Sulfonic acids, petroleum, sodium salts		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
tetrapotassium pyrophosphate		No data available				
potassium hydroxide		No data available				
disodium trisilicate		No data available				
Sulfonic acids, petroleum, sodium salts		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
tetrapotassium pyrophosphate			No data available					
potassium hydroxide			No data available					
disodium trisilicate			No data available					
Sulfonic acids, petroleum, sodium salts			No data available					
1-Dodecanamine, N,N-dimethyl-, N-oxide			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
tetrapotassium pyrophosphate	No data available
potassium hydroxide	No data available
disodium trisilicate	No data available
Sulfonic acids, petroleum, sodium salts	No data available
1-Dodecanamine, N,N-dimethyl-, N-oxide	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
tetrapotassium pyrophosphate	No data available
potassium hydroxide	No data available
disodium trisilicate	No data available
Sulfonic acids, petroleum, sodium salts	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 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)
tetrapotassium pyrophosphate	LC 50	> 100	Oncorhynchus mykiss	OECD 203 (EU C.1)	96
potassium hydroxide	LC 50	80	Various species	Method not given	24
disodium trisilicate	LC 50	260 - 310	Oncorhynchus mykiss	Method not given	96
Sulfonic acids, petroleum, sodium salts		No data available			
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)
tetrapotassium pyrophosphate	EC 50	> 100	Daphnia magna Straus	OECD 202 (EU C.2)	48
potassium hydroxide	EC 50	30 - 1000	Daphnia magna Straus	Method not given	-
disodium trisilicate	EC 50	1700	Daphnia magna Straus	Method not given	48
Sulfonic acids, petroleum, sodium salts		No data available			
1-Dodecanamine, N,N-dimethyl-, N-oxide		No data available			

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrapotassium pyrophosphate		No data available			-
potassium hydroxide		No data available			-
disodium trisilicate	EC 50	207	Desmodesmus subspicatus	Method not given	72
Sulfonic acids, petroleum, sodium salts		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)
tetrapotassium pyrophosphate		No data available			-
potassium hydroxide		No data available			-
disodium trisilicate		No data available			-
Sulfonic acids, petroleum, sodium salts		No data available			
1-Dodecanamine, N,N-dimethyl-, N-oxide		No data available			

Impact on sewage plants - toxicity to bacteria					
Ingredient(s)	Endpoint	Value	Inoculum	Method	Exposure
		(mg/l)			time
tetrapotassium pyrophosphate		No data			
		available			
potassium hydroxide		No data			
		available			
disodium trisilicate		No data			
		available			
Sulfonic acids, petroleum, sodium salts		No data			
		available			
1-Dodecanamine, N,N-dimethyl-, N-oxide		No data			
		available			

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

Aquatic long-term toxicity - fish						
Ingredient(s)	Endpoint	Value	Species	Method	Exposuro	Effects observed
ingredient(s)	Епаропі	value	Species	wethou	Exposure	Ellects observed
		(mg/l)			time	
		(ing/i)			ume	

tetrapotassium pyrophosphate		No data available				
potassium hydroxide		No data available				
disodium trisilicate	NOEC	348	Brachydanio rerio	Method not given	96 hour(s)	
Sulfonic acids, petroleum, sodium salts		No data available				
1-Dodecanamine, N,N-dimethyl-, N-oxide		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
tetrapotassium pyrophosphate		No data available				
potassium hydroxide		No data available				
disodium trisilicate		No data available				
Sulfonic acids, petroleum, sodium salts		No data available				
1-Dodecanamine, N,N-dimethyl-, N-oxide		No data available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
tetrapotassium pyrophosphate		No data available			-	
potassium hydroxide		No data available			-	
disodium trisilicate		No data available			-	
Sulfonic acids, petroleum, sodium salts		No data available				
1-Dodecanamine, N,N-dimethyl-, N-oxide		No data available				

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

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

Terrestrial toxicity - plants, if available:

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

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
					time (days)	
tetrapotassium pyrophosphate		No data			-	
		available				
potassium hydroxide		No data			-	
		available				
disodium trisilicate		No data			-	
		available				

Terrestrial toxicity - beneficial insects, if available:

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

avaliable			available				
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Terrestrial toxicity - soil bacteria, if available	0
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Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
tetrapotassium pyrophosphate		No data available			-	
potassium hydroxide		No data available			-	
disodium trisilicate		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
tetrapotassium pyrophosphate					Not applicable (inorganic substance)
potassium hydroxide					Not applicable (inorganic substance)
disodium trisilicate					Not applicable (inorganic substance)
Sulfonic acids, petroleum, sodium salts	Activated sludge, aerobe			OECD 301D	Not readily biodegradable.
1-Dodecanamine, N,N-dimethyl-, N-oxide				OECD 301D	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
Sulfonic acids, petroleum, sodium salts					Not readily biodegradable.

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
tetrapotassium pyrophosphate	-2	Method not given	No bioaccumulation expected	
potassium hydroxide	No data available		Not relevant, does not bioaccumulate	
disodium trisilicate	No data available		Low potential for bioaccumulation	
Sulfonic acids, petroleum, sodium salts	No data available			
1-Dodecanamine, N,N-dimethyl-, N-oxide	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
tetrapotassium pyrophosphate	No data available				
potassium hydroxide	No data available				
disodium trisilicate	No data available				
Sulfonic acids, petroleum, sodium salts	No data available				
1-Dodecanamine, N,N-dimethyl-, N-oxide	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
tetrapotassium pyrophosphate	No data available				
potassium hydroxide	No data available				Low potential for adsorption to soil
disodium trisilicate	No data available				
Sulfonic acids, petroleum, sodium salts	No data available				
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: 1814
- 14.2 UN proper shipping name:
- Potassium hydroxide solution 14.3 Transport hazard class(es):
- Class: 8
- Label(s): 8
- 14.4 Packing group: II
- 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

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

End of Safety Data Sheet