

BREAK UP D3.5

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Version: 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name BREAK UP D3.5

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@sealedair.com
Website: <http://www.sealedair.com/>

1.4 Emergency telephone number

Call 1800 033 111 (24hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Serious eye damage, Category 1

Skin irritation, Category 2

2.2 Label elements



Signal word: Danger

Hazard statements:

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Prevention statement(s):

P233 - Keep container tightly closed.

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):

P332 + P313 - If skin irritation occurs: Get medical advice or attention.

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).

P362 - Take off contaminated clothing.

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 (%): 2.5

Not classified

SECTION 3: Composition/information on ingredients**3.1 Substances / Mixtures**

Ingredient(s)	CAS number	EC number	Classification	Weight percent
sodium xylene sulphonate	1300-72-7	215-090-9	Eye Irrit. 2 (H319)	3-10
disodium metasilicate	6834-92-0	229-912-9	Skin Corr. 1B (H314) STOT SE 3 (H335) Met. Corr. 1 (H290)	3-10
potassium carbonate	584-08-7	209-529-3	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)	3-10
2-butoxyethanol	111-76-2	203-905-0	Flam. Liq. 4 (H227) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	1-3
tetrapotassium pyrophosphate	7320-34-5	230-785-7	Eye Irrit. 2 (H319)	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 unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

Inhalation:

Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if you feel unwell.

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

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. Get medical attention or advice if you feel unwell.

Self-protection of first aider:

Consider personal protective equipment as indicated in subsection 8.2.

First aid facilities:

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 irritation.

Eye contact:

Causes severe or permanent damage.

Ingestion:

No known effects or symptoms in normal use.

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.

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5.4 Hazchem code

None allocated

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

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 advised by Sealed Air. 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 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 container. 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)
2-butoxyethanol	20 ppm 96.9 mg/m ³	50 ppm 242 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 undiluted 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).

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

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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: No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 2.5

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.

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.

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, Pale Yellow

Odour: Product specific

Odour threshold: Not applicable

pH: ≈ 13.3 (neat)

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.

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: 1.11 g/cm³ (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

Viscosity: Not determined

Explosive properties: Not explosive.

Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals: Not corrosive

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 water and 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

ATE - Dermal (mg/kg): >5000

ATE - Inhalatory, vapours (mg/l): >50

Skin irritation and corrosivity**Result:** Skin irritant 2**Method:** Alkali or acid reserve

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

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium xylene sulphonate	LD ₅₀	> 7200	Rat	Method not given	
disodium metasilicate	LD ₅₀	770 - 820	Mouse	Method not given	
potassium carbonate	LD ₅₀	> 2000	Rat	Method not given	
2-butoxyethanol	LD ₅₀	1746	Rat	Method not given	
tetrapotassium pyrophosphate	LD ₅₀	> 2000	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium xylene sulphonate	LD ₅₀	> 2000	Rabbit	Method not given	
disodium metasilicate		No data available			
potassium carbonate	LD ₅₀	> 2000	Rabbit	Method not given	
2-butoxyethanol	LD ₅₀	6411		Method not given	
tetrapotassium pyrophosphate	LD ₅₀	> 2000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium xylene sulphonate	LC ₀	> 6.41 (mist)	Rat	Method not given	4
disodium metasilicate		No data available			
potassium carbonate		No data available			
2-butoxyethanol	LC ₅₀	> 2 (mist)	Rat	Method not given	4
tetrapotassium pyrophosphate	LC ₅₀	> 1.1	Rat	Method not given	4

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium xylene sulphonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	
disodium metasilicate	Corrosive		Method not given	
potassium carbonate	Irritant		Weight of evidence	
2-butoxyethanol	Irritant	Rabbit	Method not given	
tetrapotassium pyrophosphate	Not irritant		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium xylene sulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	
disodium metasilicate	Corrosive		Method not given	
potassium carbonate	Irritant	Rabbit	OECD 405 (EU B.5)	
2-butoxyethanol	Irritant	Rabbit	OECD 405 (EU B.5)	
tetrapotassium pyrophosphate	Irritant		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium xylene sulphonate	No data available			

disodium metasilicate	No data available			
potassium carbonate	No data available			
2-butoxyethanol	No data available			
tetrapotassium pyrophosphate	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium xylene sulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
disodium metasilicate	No data available			
potassium carbonate	Not sensitising	Guinea pig	Method not given	
2-butoxyethanol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
tetrapotassium pyrophosphate	Not sensitising		Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium xylene sulphonate	No data available			
disodium metasilicate	No data available			
potassium carbonate	No data available			
2-butoxyethanol	No data available			
tetrapotassium pyrophosphate	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)
sodium xylene sulphonate	No evidence for mutagenicity, negative test results	OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
disodium metasilicate	No data available		No data available	
potassium carbonate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473	No data available	
2-butoxyethanol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
tetrapotassium pyrophosphate	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium xylene sulphonate	No evidence for carcinogenicity, negative test results
disodium metasilicate	No data available
potassium carbonate	No data available
2-butoxyethanol	No evidence for carcinogenicity, negative test results
tetrapotassium pyrophosphate	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium xylene sulphonate	NOAEL	Teratogenic effects	> 936	Rat	Non guideline test		
disodium metasilicate			No data available				
potassium carbonate	NOAEL	Teratogenic effects	180	Rat	Not known		
2-butoxyethanol			No data available				
tetrapotassium pyrophosphate			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium xylene sulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B.26)	90	
disodium metasilicate	NOAEL	> 227 - 237	Rat	Method not given		
potassium carbonate	NOAEL	6054	Rat	Method not given	28	
2-butoxyethanol		No data available				
tetrapotassium pyrophosphate		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
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		(mg/kg bw/d)			time (days)	affected
sodium xylene sulphonate	NOAEL	> 440		OECD 411 (EU B.28)	90	
disodium metasilicate		No data available				
potassium carbonate		No data available				
2-butoxyethanol		No data available				
tetrapotassium pyrophosphate		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium xylene sulphonate		No data available				
disodium metasilicate		No data available				
potassium carbonate	NOAEL	0.06	Rat	Read across	21	
2-butoxyethanol		No data available				
tetrapotassium pyrophosphate		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium xylene sulphonate	Oral		No data available	Rat	OECD 453 (EU B.33)	24 month(s)	No adverse effects observed	
disodium metasilicate			No data available					
potassium carbonate	Oral	NOAEL	2667	Rat	Read across	32 month(s)		
2-butoxyethanol			No data available					
tetrapotassium pyrophosphate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium xylene sulphonate	No data available
disodium metasilicate	No data available
potassium carbonate	No data available
2-butoxyethanol	No data available
tetrapotassium pyrophosphate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium xylene sulphonate	No data available
disodium metasilicate	No data available
potassium carbonate	No data available
2-butoxyethanol	No data available
tetrapotassium pyrophosphate	No data available

Aspiration hazard

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

Potential adverse health effects and symptoms

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

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

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

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium xylene sulphonate	LC ₅₀	> 1000	<i>Fish</i>	EPA-OPPTS	96
disodium metasilicate	LC ₅₀	210	<i>Brachydanio</i>	Method not given	96

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			<i>rerio</i>		
potassium carbonate	LC ₅₀	68	<i>Oncorhynchus mykiss</i>	Method not given	96
2-butoxyethanol	LC ₅₀	> 100	<i>Fish</i>	Method not given	96
tetrapotassium pyrophosphate	LC ₅₀	> 100	<i>Oncorhynchus mykiss</i>	OECD 203	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium xylene sulphonate	EC ₅₀	> 1000	<i>Daphnia</i>	EPA-OPPTS	48
disodium metasilicate	EC ₅₀	1700	<i>Daphnia</i>	Method not given	48
potassium carbonate	EC ₅₀	200	<i>Daphnia pulex</i>	Method not given	48
2-butoxyethanol	EC ₅₀	> 100	<i>Daphnia magna Straus</i>	Method not given	24
tetrapotassium pyrophosphate	EC ₅₀	> 100	<i>Daphnia magna Straus</i>	OECD 202	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium xylene sulphonate	EC ₅₀	> 230	<i>Not specified</i>	US-EPA 1994	96
disodium metasilicate	EC ₅₀	207	<i>Chlorella pyrenoidosa</i>	Method not given	72
potassium carbonate		No data available			-
2-butoxyethanol	EC ₅₀	> 100	<i>Not specified</i>	Method not given	168
tetrapotassium pyrophosphate		No data available			-

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium xylene sulphonate		No data available			-
disodium metasilicate		No data available			-
potassium carbonate		No data available			-
2-butoxyethanol		No data available			-
tetrapotassium pyrophosphate		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium xylene sulphonate	E _r C ₅₀	> 1000	<i>Activated sludge</i>	OECD 209	3 hour(s)
disodium metasilicate	EC ₅₀	> 100	<i>Activated sludge</i>	Method not given	3 hour(s)
potassium carbonate		No data available			
2-butoxyethanol	EC ₀	700	<i>Pseudomonas putida</i>	Method not given	16 hour(s)
tetrapotassium pyrophosphate		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium xylene sulphonate		No data available				
disodium metasilicate		No data available				
potassium carbonate		No data available				
2-butoxyethanol		No data available				
tetrapotassium pyrophosphate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium xylene sulphonate		No data available				
disodium metasilicate		No data available				

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potassium carbonate		No data available				
2-butoxyethanol		No data available				
tetrapotassium pyrophosphate		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
sodium xylene sulphonate		No data available			-	
disodium metasilicate		No data available			-	
potassium carbonate		No data available			-	
2-butoxyethanol		No data available			-	
tetrapotassium pyrophosphate		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
sodium xylene sulphonate		No data available			-	
disodium metasilicate		No data available			-	
potassium carbonate		No data available			-	
2-butoxyethanol		No data available			-	
tetrapotassium pyrophosphate		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium xylene sulphonate		No data available			-	
disodium metasilicate		No data available			-	
potassium carbonate		No data available			-	
2-butoxyethanol		No data available			-	
tetrapotassium pyrophosphate		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium xylene sulphonate		No data available			-	
disodium metasilicate		No data available			-	
potassium carbonate		No data available			-	
2-butoxyethanol		No data available			-	
tetrapotassium pyrophosphate		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium xylene sulphonate		No data available			-	
disodium metasilicate		No data available			-	
potassium carbonate		No data available			-	
2-butoxyethanol		No data available			-	
tetrapotassium pyrophosphate		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium xylene sulphonate		No data available			-	
disodium metasilicate		No data available			-	
potassium carbonate		No data available			-	
2-butoxyethanol		No data available			-	
tetrapotassium pyrophosphate		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
sodium xylene sulphonate			99.8 % in 28 day(s)	OECD 301B	Readily biodegradable
disodium metasilicate					Not applicable (inorganic substance)
potassium carbonate					Not applicable (inorganic substance)
2-butoxyethanol			100 % in 28 day(s)	Method not given	Readily biodegradable
tetrapotassium pyrophosphate					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 K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
sodium xylene sulphonate	-3.12	Method not given	No bioaccumulation expected	
disodium metasilicate	No data available			
potassium carbonate	No data available		No bioaccumulation expected	
2-butoxyethanol	0.81	OECD 107	No bioaccumulation expected	
tetrapotassium pyrophosphate	-2	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium xylene sulphonate	No data available				
disodium metasilicate	No data available				
potassium carbonate	No data available				
2-butoxyethanol	No data available				
tetrapotassium pyrophosphate	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
sodium xylene sulphonate	No data available				
disodium metasilicate	No data available				
potassium carbonate	No data available				Potential for mobility in soil, soluble in water
2-butoxyethanol	No data available				Potential for mobility in soil, soluble in water
tetrapotassium pyrophosphate	No data available				

12.5 Other adverse effects

No other adverse effects known.

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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: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

Hazchem code: None allocated

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:

- H227 - Combustible liquid.
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H332 - Harmful if inhaled.
- H335 - May cause respiratory irritation.

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

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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