Safety Data Sheet

SUMA MULTI-CONC D2 CONC

Revision: 2019-04-30 **Version:** 01.1

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier
Product name: SUMA MULTI-CONC D2 CONC

1.2 Recommended use and restrictions on use
Identified uses:
All purpose cleaner
Restrictions of use:
Uses other than those identified are not recommended

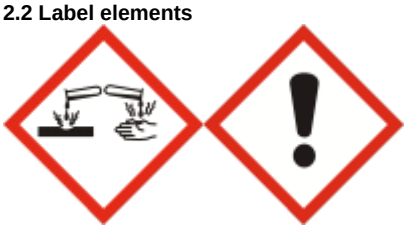
1.3 Details of the supplier
Diversey Australia Pty. Limited
29 Chifley St, Smithfield, NSW, 2164, Australia
Telephone: 1800 647 779 (toll free)
Fax: (02) 9725 5767
Email: aucustserv@diversey.com
Website: www.diversey.com/

1.4 Emergency telephone number
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
Flammable liquids, Category 4
Skin corrosion, Category 1B
Acute toxicity, oral, Category 4
Specific target organ toxicity (single exposure), Category 3

2.2 Label elements



Signal word: Danger

Hazard statements:
H227 - Combustible liquid.
H314 - Causes severe skin burns and eye damage.
H302 - Harmful if swallowed.
H335 - May cause respiratory irritation.

Prevention statement(s):
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P210 - Keep away from flames and hot surfaces. No smoking.
P233 - Keep container tightly closed.
P260 - Do not breathe vapours.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves, protective clothing and eye or face protection.

Response statement(s):
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTRE, doctor or physician.

P321 - Specific treatment (see supplemental first aid instructions on this label).
P330 - Rinse mouth.
P363 - Wash contaminated clothing before reuse.
P370 + P378 - In case of fire: Use chemical powder to extinguish.

Storage statement(s):
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.

Disposal statement(s):
P501 - Dispose of unused content as chemical waste.

2.3 Other hazards

2.4 Classification diluted product:
Recommended maximum concentration (%): 0.67

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
alkyl alcohol ethoxylate	69011-36-5	[4]	10-30
isotridecanol, ethoxylated	69011-36-5	[4]	3-10
2-aminoethanol	141-43-5	205-483-3	3-10
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	85480-55-3	287-335-8	3-10
1-methoxy-2-propanol	107-98-2	203-539-1	1-3
propan-2-ol	67-63-0	200-661-7	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: Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If 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 effects, both acute and delayed

Inhalation: May cause respiratory irritation.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

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

4.3 Indication of any immediate medical attention and special treatment needed
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

Poison Information Center: Call 13 11 26 (Australia Wide).

SECTION 5: Firefighting measures

5.1 Extinguishing media
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
No special hazards known.

5.3 Advice for firefighters
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

5.4 Hazchem code
2X
2 - Fine water spray.
X - Liquid-tight chemical protective clothing and breathing apparatus. Contain.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Turn off all sources of ignition. Ventilate the area. Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions
Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up
Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Ensure adequate ventilation.

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
Keep away from flames and hot surfaces. No smoking. Keep away from heat. Take precautionary measures against static discharges.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Do not breathe vapours. Use only with adequate ventilation.

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. Store in a well-ventilated place. Keep cool.
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-aminoethanol	3 ppm 7.5 mg/m³	6 ppm 15 mg/m³	
1-methoxy-2-propanol	100 ppm 369 mg/m³	150 ppm 553 mg/m³	
propan-2-ol	400 ppm 983 mg/m³	500 ppm 1230 mg/m³	

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). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.
Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.
Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
Respiratory protection: Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 0.67

Appropriate engineering controls: Use only in well ventilated areas.
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.
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, Dark Blue	
Odour: Product specific	
Odour threshold: Not applicable	
pH: ≈ 11.2 (neat)	
Dilution pH: < 10 (0.13%)	
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	
Flammability (liquid): Not determined.	
Flash point (°C): Not determined	
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: ≈ 1.045 (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: ≈ 70 mPa.s (25 °C)
Explosive properties: Not explosive. Vapours may form explosive mixtures with air.
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
None known under normal use conditions.

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): 1100
ATE - Dermal (mg/kg): >5000
ATE - Inhalatory, vapours (mg/l): >50

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)
alkyl alcohol ethoxylate	LD_{50}	> 300-2000	Rat	OECD 423 (EU B.1 tris)	
isotridecanol, ethoxylated	LD_{50}	> 300-2000	Rat	Weight of evidence	
2-aminoethanol	LD_{50}	500	Rat	OECD 401 (EU B.1)	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol	LD_{50}	> 5000	Rat	OECD 401 (EU B.1)	
propan-2-ol	LD_{50}	3570	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LD_{50}	> 2000	Rabbit	Method not given	
isotridecanol, ethoxylated	LD_{50}	> 2000	Rabbit	Weight of evidence	
2-aminoethanol	LD_{50}	1025	Rabbit	Method not given	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol	LD_{50}	> 15800	Rabbit	OECD 402 (EU B.3)	
propan-2-ol	LD_{50}	> 2000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate		No data available			
isotridecanol, ethoxylated		No data available			

2-aminoethanol	LC_{50}	11	Rat	Method not given	4
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol	LC_{Lo}	> 25.5	Rat	OECD 403 (EU B.2)	4
propan-2-ol	LC_{50}	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Not irritant	Rabbit	OECD 404 (EU B.4)	
isotridecanol, ethoxylated	Not irritant	Rabbit	OECD 404 (EU B.4)	
2-aminoethanol	Corrosive	Rabbit	OECD 404 (EU B.4)	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available			
1-methoxy-2-propanol	Not irritant	Rat	OECD 404 (EU B.4)	
propan-2-ol	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	
isotridecanol, ethoxylated	Severe damage	Rabbit	OECD 405 (EU B.5)	
2-aminoethanol	Severe damage	Rabbit	OECD 405 (EU B.5)	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available			
1-methoxy-2-propanol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
propan-2-ol	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
isotridecanol, ethoxylated	No data available			
2-aminoethanol	Irritating to respiratory tract		Method not given	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available			
1-methoxy-2-propanol	No data available			
propan-2-ol	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	
isotridecanol, ethoxylated	Not sensitising	Guinea pig	Method not given	
2-aminoethanol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available			
1-methoxy-2-propanol	Not sensitising	Guinea pig	Method not given	
propan-2-ol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
isotridecanol, ethoxylated	No data available			
2-aminoethanol	No data available			
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available			
1-methoxy-2-propanol	No data available			
propan-2-ol	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)
alkyl alcohol ethoxylate	No evidence of genotoxicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given
isotridecanol, ethoxylated	No evidence for mutagenicity	Method not given Weight of evidence	No evidence for mutagenicity, negative test results	Method not given Weight of evidence
2-aminoethanol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476 (Mouse lymphoma)	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
benzenesulphonic acid, mono-C10-13-alkyl	No data available		No data available	

derivs., compds. with ethanolamine				
1-methoxy-2-propanol	No evidence for mutagenicity, negative test results	Method not given	No data available	
propan-2-ol	No evidence for mutagenicity, negative test results No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
alkyl alcohol ethoxylate	No evidence for carcinogenicity, weight-of-evidence
isotridecanol, ethoxylated	No evidence for carcinogenicity, weight-of-evidence
2-aminoethanol	No evidence for carcinogenicity, weight-of-evidence
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available
1-methoxy-2-propanol	No evidence for carcinogenicity, negative test results
propan-2-ol	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
alkyl alcohol ethoxylate	NOAEL	Teratogenic effects	> 50	Rat	Not known		No known significant effects or critical hazards
isotridecanol, ethoxylated	NOAEL	Maternal toxicity	> 250	Rat	Weight of evidence		Not toxic for reproduction
2-aminoethanol	NOAEL	Developmental toxicity	> 75	Rabbit	OECD 414 (EU B.31), oral	6 - 15 day(s)	No evidence for developmental toxicity No evidence for reproductive toxicity
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine			No data available				
1-methoxy-2-propanol			No data available				No evidence for reproductive toxicity
propan-2-ol			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
alkyl alcohol ethoxylate		No data available				
isotridecanol, ethoxylated		No data available				
2-aminoethanol	NOAEL	300	Rat		75	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available				
1-methoxy-2-propanol		No data available				
propan-2-ol		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
alkyl alcohol ethoxylate		No data available				
isotridecanol, ethoxylated		No data available				
2-aminoethanol		No data available				
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available				
1-methoxy-2-propanol		No data available				
propan-2-ol		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
alkyl alcohol ethoxylate		No data available				
isotridecanol, ethoxylated		No data available				
2-aminoethanol		No data available				
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available				
1-methoxy-2-propanol		No data available				

propan-2-ol		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
alkyl alcohol ethoxylate	Oral	NOAEL	50	Rat	Method not given	24 month(s)	Effects on organ weights	
isotridecanol, ethoxylated	Oral	NOAEL	50	Rat	Weight of evidence	24 month(s)	Effects on body weight and food/water consumption Effects on organ weights	
2-aminoethanol			No data available					
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine			No data available					
1-methoxy-2-propanol			No data available					
propan-2-ol			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	Not applicable
isotridecanol, ethoxylated	Not applicable
2-aminoethanol	Respiratory tract
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available
1-methoxy-2-propanol	No data available
propan-2-ol	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	Not applicable
isotridecanol, ethoxylated	Not applicable
2-aminoethanol	No data available
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available
1-methoxy-2-propanol	Kidneys
propan-2-ol	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)
alkyl alcohol ethoxylate	LC_{50}	1 - 10	*Cyprinus carpio*	OECD 203 (EU C.1)	96
isotridecanol, ethoxylated	LC_{50}	> 10 - 100	*Cyprinus carpio*	OECD 203 (EU C.1) Weight of evidence	96
2-aminoethanol	LC_{50}	349	*Cyprinus carpio*	OECD 203 (EU C.1)	96
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol	LC_{50}	> 1000	*Oncorhynchus mykiss*	Method not given	96
propan-2-ol	LC_{50}	> 100	*Pimephales promelas*	Method not given	48

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC_{50}	1 - 10	*Daphnia magna Straus*	OECD 202, static	48
isotridecanol, ethoxylated	EC_{50}	> 10 - 100	*Daphnia*	OECD 202, static	48

			magna Straus		
2-aminoethanol	EC 50	65	*Daphnia magna Straus*	OECD 202, static	48
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol	EC 50	21100 - 25900	*Daphnia magna Straus*	Method not given	48
propan-2-ol	EC 50	> 100	*Daphnia magna Straus*	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC 50	1 - 10	*Desmodesmus subspicatus*	OECD 201, static	72
isotridecanol, ethoxylated	EC 50	> 10 - 100	*Desmodesmus subspicatus*	OECD 201, static Weight of evidence	72
2-aminoethanol	EC 50	22		OECD 201 (EU C.3)	72
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol	EC 50	> 1000	*Pseudokirchneriella subcapitata*	Method not given	168
propan-2-ol	EC 50	> 100	*Scenedesmus quadricauda*	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyl alcohol ethoxylate		No data available			-
isotridecanol, ethoxylated		No data available			-
2-aminoethanol		No data available			-
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol		No data available			-
propan-2-ol		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol ethoxylate	EC 10	> 10000	*Activated sludge*	DIN 38412 / Part 8	17 hour(s)
isotridecanol, ethoxylated	EC 10	> 10000	*Bacteria*	DIN 38412 / Part 8	17 hour(s)
2-aminoethanol	EC 50	> 1000	*Activated sludge*	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol	EC 50	1000	*Activated sludge*	Method not given	3 hour(s)
propan-2-ol	EC 50	> 1000	*Activated sludge*	Method not given	

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		No data available				
isotridecanol, ethoxylated		No data available				
2-aminoethanol	NOEC	1.2	*Oryzias latipes*	OECD 210	30 day(s)	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available				
1-methoxy-2-propanol		No data available				
propan-2-ol		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		No data available				
isotridecanol, ethoxylated	EC 10	2.6	*Daphnia magna*	OECD 211, semi-static	21 day(s)	Effects on reproduction

2-aminoethanol	NOEC	0.85	*Daphnia magna*	OECD 202	21 day(s)	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available				
1-methoxy-2-propanol		No data available				
propan-2-ol		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
alkyl alcohol ethoxylate		No data available			-	
isotridecanol, ethoxylated		No data available			-	
2-aminoethanol		No data available			-	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available				
1-methoxy-2-propanol		No data available			-	
propan-2-ol		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
alkyl alcohol ethoxylate	NOEC	220	*Eisenia fetida*		-	
isotridecanol, ethoxylated	NOEC	220	*Eisenia fetida*		-	
2-aminoethanol		No data available			-	
1-methoxy-2-propanol		No data available			-	
propan-2-ol		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate	NOEC	10	*Lepidium sativum*	OECD 208	-	
isotridecanol, ethoxylated	NOEC	10	*Lepidium sativum*	OECD 208	-	
2-aminoethanol		No data available			-	
1-methoxy-2-propanol		No data available			-	
propan-2-ol		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate		No data available			-	
isotridecanol, ethoxylated		No data available			-	
2-aminoethanol		No data available			-	
1-methoxy-2-propanol		No data available			-	
propan-2-ol		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate		No data available			-	
isotridecanol, ethoxylated		No data available			-	
2-aminoethanol		No data available			-	
1-methoxy-2-propanol		No data available			-	

propan-2-ol		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate		No data available			-	
isotridecanol, ethoxylated		No data available			-	
2-aminoethanol		No data available			-	
1-methoxy-2-propanol		No data available			-	
propan-2-ol		No data available			-	

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
1-methoxy-2-propanol	< 1 day(s)	Method not given	Rapidly photodegradable	

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
alkyl alcohol ethoxylate	Activated sludge, aerobe	CO_2 production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
isotridecanol, ethoxylated		CO_2 production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
2-aminoethanol		DOC reduction	> 90 % in 21 day(s)	OECD 301A	Readily biodegradable
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	Activated sludge, aerobe			OECD 301D	Not readily biodegradable.
1-methoxy-2-propanol			96 % in 28 day(s)	OECD 301E	Readily biodegradable
propan-2-ol			95 % in 21 day(s)	OECD 301E	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol ethoxylate	-		No bioaccumulation expected	
isotridecanol, ethoxylated	No data available		No bioaccumulation expected	
2-aminoethanol	- 1.91	OECD 107	No bioaccumulation expected	
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available			
1-methoxy-2-propanol	0.37	Method not given	Low potential for bioaccumulation	
propan-2-ol	0.05	OECD 107	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol ethoxylate	-			No bioaccumulation expected	
isotridecanol, ethoxylated	No data available			No bioaccumulation expected	
2-aminoethanol	No data available				
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available				
1-methoxy-2-propanol	3.2		Method not given	Low potential for bioaccumulation	
propan-2-ol	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

alkyl alcohol ethoxylate	No data available				Immobile in soil or sediment
isotridecanol, ethoxylated	No data available				Immobile in soil or sediment
2-aminoethanol	0.067		Model calculation		Potential for mobility in soil, soluble in water Adsorption to solid soil phase is not expected
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine	No data available				
1-methoxy-2-propanol	No data available				High potential for mobility in soil
propan-2-ol	No data available				Potential for mobility in soil, soluble in water

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: 2491
14.2 UN proper shipping name:
Ethanolamine 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: 2X

The product has been classified, labelled and packaged in accordance with the requirements of ADG7.5 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) 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:
- ATE - Acute Toxicity Estimate
- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LD50 - Lethal Dose, 50% / Median Lethal dose
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- EC No. - European Community Number
- vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet