

SUMA MULTI-CONC D2 CONC

Revision: 2017-01-26

Version: 01.0

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

SEALED AIR (NEW ZEALAND)

24 Bancroft Crescent, Glendene, Auckland, 0602, New Zealand

Telephone: +64 9 813 9800; 0800 803 615 (toll free)

Fax: + 64 9 813 9801

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

1.4 Emergency telephone number

Call 0800 243 622 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

HSNO Classification

6.1E - Substances that are acutely toxic (oral)

8.2C - Corrosive to dermal tissue

8.3A - Corrosive to ocular tissue

9.1D - Slightly harmful to the aquatic environment or are otherwise designed for biocidal action

2.2 Label elements



Signal word: Danger

Hazard statements:

H303 - May be harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

Prevention statement(s):

P260 - Do not breathe vapours.

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

P280 - Wear protective gloves, protective clothing and eye or face protection.

P273 - Avoid release to the environment.

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.

P363 - Wash contaminated clothing before reuse.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 - Immediately call a POISON CENTRE, doctor or physician.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage statement(s):

P405 - Store locked up.

Disposal statement(s):

P501 - Dispose of unused content as chemical waste.

2.3 Other hazards

No other hazards known.

2.4 Classification diluted product:

Recommended maximum concentration (%): 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	Polymer*	10-30
isotridecanol, ethoxylated	69011-36-5	Polymer*	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

* Polymer.

Workplace exposure limit(s), if available, are listed in subsection 8.1.

SECTION 4: First aid measures**4.1 Description of first aid measures****General Information:**

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

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 0800 764 766 (0800 POISON) or +643 479 7248

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.

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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**

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. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

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:**

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 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 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)	Short term value(s)	Ceiling value(s)
2-aminoethanol	3 ppm 7.5 mg/m ³	6 ppm 15 mg/m ³	
1-methoxy-2-propanol	100 ppm 369 mg/m ³	150 ppm 553 mg/m ³	
propan-2-ol	400 ppm 983 mg/m ³	500 ppm 1230 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

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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: \geq 480 min Material thickness: \geq 0.7 mm Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: \geq 30 min Material thickness: \geq 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:	No special requirements under normal use conditions.
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: \approx 11.2 (neat)	ISO 4316
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 determined Not applicable.	
Sustained combustion: Not applicable.	
Evaporation rate: Not determined	Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids	
Upper/lower flammability limit (%): Not determined	
Vapour pressure: Not determined	
Vapour density: Not determined	Not relevant to classification of this product
Relative density: \approx 1.045 (20 °C)	OECD 109 (EU A.3)
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: \approx 70 mPa.s (20 °C)	
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

Store in a well-ventilated place.

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): 1300

ATE - Dermal (mg/kg): >5000

ATE - Inhalatory, mists (mg/l): >20

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	1515	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	4016	Rat	Method not given	
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	> 2000	Rabbit	Method not given	
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		No mortality observed	Rat	Non guideline test	6
benzenesulphonic acid, mono-C10-13-alkyl derivs., compds. with ethanolamine		No data available			
1-methoxy-2-propanol	LC ₅₀	> 25.8 (vapour)	Rat	Method not given	6
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	No data available			
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 derivs., compds. with ethanolamine	No data available		No data available	
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	OECD 471 (EU B.12/13)	No data available	

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

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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					

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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	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-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	No data available
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	<i>Cyprinus carpio</i>	OECD 203 (EU C.1)	96
isotridecanol, ethoxylated	LC ₅₀	> 1 - 10	<i>Cyprinus carpio</i>	OECD 203 (EU C.1) Weight of evidence	96
2-aminoethanol	LC ₅₀	349	<i>Cyprinus carpio</i>	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	<i>Oncorhynchus mykiss</i>	Method not given	96
propan-2-ol	LC ₅₀	> 100	<i>Pimephales promelas</i>	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	<i>Daphnia magna Straus</i>	OECD 202, static	48
isotridecanol, ethoxylated	EC ₅₀	> 1 - 10	<i>Daphnia magna Straus</i>	OECD 202, static	48
2-aminoethanol	EC ₅₀	65	<i>Daphnia magna Straus</i>	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	<i>Daphnia magna Straus</i>	Method not given	48
propan-2-ol	EC ₅₀	> 100	<i>Daphnia magna Straus</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
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alkyl alcohol ethoxylate	EC ₅₀	1 - 10	<i>Desmodesmus subspicatus</i>	OECD 201, static	72
isotridecanol, ethoxylated	EC ₅₀	> 1 - 10	<i>Desmodesmus subspicatus</i>	OECD 201, static Weight of evidence	72
2-aminoethanol	NOEC	1	<i>Pseudokirchneriella subcapitata</i>	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	<i>Pseudokirchneriella subcapitata</i>	Method not given	168
propan-2-ol	EC ₅₀	> 100	<i>Scenedesmus quadricauda</i>	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	<i>Activated sludge</i>	DIN 38412 / Part 8	17 hour(s)
isotridecanol, ethoxylated	EC ₁₀	> 10000	<i>Bacteria</i>	DIN 38412 / Part 8	17 hour(s)
2-aminoethanol	EC ₅₀	> 1000	<i>Activated sludge</i>	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	<i>Activated sludge</i>	Method not given	3 hour(s)
propan-2-ol	EC ₅₀	> 1000	<i>Activated sludge</i>	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	<i>Oryzias latipes</i>	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		No data available				
2-aminoethanol	NOEC	0.85	<i>Daphnia magna</i>	OECD 211	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	Species	Method	Exposure	Effects observed
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		(mg/kg dw sediment)			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			-	

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	<i>Eisenia fetida</i>		-	
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 - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate	NOEC	10	<i>Lepidium sativum</i>	OECD 208	-	
isotridecanol, ethoxylated	NOEC	10	<i>Lepidium sativum</i>	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			-	

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		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		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					No data available
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 potentialPartition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol ethoxylate	No data available			
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 data available				
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 K _{oc}	Desorption coefficient Log K _{oc} (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

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propan-2-ol	No data available			Potential for mobility in soil, soluble in water
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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:

Suitable cleaning agents:

Dispose of observing national or local regulations.
Water, if necessary with cleaning agent.

SECTION 14: Transport information**ADR, RID, ADN, IMO/IMDG, ICAO/IATA**

14.1 UN number: 2491

14.2 UN proper shipping name:

Ethanolamine solution

14.3 Transport hazard class(es):

Class: 8

Label(s): 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 73/78 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 .? 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**

HSNO Approval Number

HSR002526.

Group standard

Cleaning Products (Corrosive) Group Standard 2006

Substances covered under this Group Standard will not require an approved handler.

Inventory Listing(s)

New Zealand: NZIoC (New Zealand Inventory of Chemicals)

All components are listed on the NZIoC inventory, or are exempt

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS32000344

Version: 01.0

Revision: 2017-01-26

Full text of the H phrases mentioned in section 3:

- H225 - Highly flammable liquid and vapour.
- H226 - Flammable liquid and vapour.
- H227 - Combustible liquid.
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H303 - May be harmful if swallowed.

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- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H316 - Causes mild skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H332 - Harmful if inhaled.
- H335 - May cause respiratory irritation.
- H336 - May cause drowsiness or dizziness.
- H402 - Harmful to aquatic life.
- H412 - Harmful to aquatic life with long lasting effects.
- H413 - May cause long lasting harmful effects to aquatic life.
- H433 - Harmful to terrestrial vertebrates.

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).

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