



Safety Data Sheet

SUMA STAR PLUS D1-PLUS

Revision: 2020-09-16

Version: 01.2

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SUMA STAR PLUS D1-PLUS

1.2 Recommended use and restrictions on use

Identified uses:

Hand dishwashing detergent

Manual cleaning of all kitchen utensils; and general light duty surface cleaning

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

Serious eye damage, Category 1

Acute toxicity, oral, Category 4

Skin irritation, Category 2

2.2 Label elements



Signal word: Danger

Hazard statements:

H302 - Harmful if swallowed.

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.

P270 - Do not eat, drink or smoke when using this product.

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).

P330 - Rinse mouth.

P362 - Take off contaminated clothing.

Disposal statement(s):

P501 - Dispose of unused content as chemical waste.

2.3 Other hazards**2.4 Classification diluted product:**

Recommended maximum concentration (% w/w): .04

Not classified as hazardous

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

Ingredient(s)	CAS number	EC number	Weight percent
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	85995-83-1	939-479-4	30-60
propane-1,2-diol	57-55-6	200-338-0	10-30
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	1187742-72-8	932-185-7	10-30
alkyl polyglucoside	110615-47-9	600-975-8	3-10

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.

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. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice or attention. 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. 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:

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.

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 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 eyes. Do not eat, drink or smoke when using this product. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original packaging. Store in a closed container.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Air limit values, if available:

Ingredient(s)	Long term value(s) (TWA)	Short term value(s) (STEL)	Peak value(s)
propane-1,2-diol	150 ppm 474 mg/m ³ 10 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 min

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	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.
<i>Recommended safety measures for handling the <u>diluted</u> product:</i>	
Recommended maximum concentration (% w/w): .04	
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:	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, Yellow	
Odour: Slightly perfumed	
Odour threshold: Not applicable	
pH ≈ 8 (neat)	ISO 4316
Dilution pH: ≈ 7 (1%)	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	
Flammability (liquid): Not flammable.	
Flash point (°C): Not applicable.	
Sustained combustion: Not applicable.	
<i>(UN Manual of Tests and Criteria, section 32, L.2)</i>	
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: ≈ 1.05 (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: Not determined	Not relevant to classification of this product
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

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): 1500

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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	LD ₅₀	300 - 2000	Rat	Read across	
propane-1,2-diol	LD ₅₀	> 10000	Rat	Method not given	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	LD ₅₀	> 5000	Rat	OECD 401 (EU B.1)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			
propane-1,2-diol	LD ₅₀	> 2000	Rabbit	Method not given	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	LD ₅₀	> 5000	Rabbit	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			
propane-1,2-diol	LC ₅₀	> 317 (mist) No mortality observed	Rabbit	Non guideline test	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	Irritant	Rabbit	OECD 404 (EU B.4)	
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	Irritant		OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	Severe damage	Rabbit	Method not given	
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	Severe damage		OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available			
propane-1,2-diol	No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available			
propane-1,2-diol	No data available			
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available		No data available	
alkyl polyglucoside	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available
propane-1,2-diol	No evidence for carcinogenicity, negative test results
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available
alkyl polyglucoside	No evidence for carcinogenicity, weight-of-evidence

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine			No data available				
propane-1,2-diol			No data available				No evidence for reproductive toxicity
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated,			No data available				

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monoisopropanolamine salt							
alkyl polyglucoside	NOAEL	Developmental toxicity Maternal toxicity	1000	Rat	OECD 414 (EU B.31), oral OECD 421, oral		No evidence for reproductive toxicity

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOAEL	100	Rat	OECD 408 (EU B.26)		

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine			No data available					
propane-1,2-diol			No data available					
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt			No data available					
alkyl polyglucoside			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available
propane-1,2-diol	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available
alkyl polyglucoside	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available
propane-1,2-diol	No data available
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated,	No data available

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monoisopropanolamine salt	
alkyl polyglucoside	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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	LC ₅₀	> 1 - 10	<i>Cyprinus carpio</i>	OECD 203, flow-through	96
propane-1,2-diol	LC ₅₀	> 1000	<i>Fish</i>	Method not given	24
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	LC ₅₀	1 - 10	<i>Fish</i>	ISO 7346	-

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	EC ₅₀	> 1 - 10	<i>Daphnia magna Straus</i>	OECD 202, static	48
propane-1,2-diol	EC ₅₀	> 100	<i>Daphnia</i>	Method not given	48
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	EC ₅₀	7	<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)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	EC ₅₀	> 10 - 100	<i>Desmodesmus subspicatus</i>	OECD 201, static	72
propane-1,2-diol	EC ₅₀	24200	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	EC ₅₀	10 - 100	<i>Not specified</i>	88/302/EEC, Part C, static	-

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			-
propane-1,2-diol		No data available			-
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			
propane-1,2-diol	EC ₀	> 20000	<i>Pseudomonas putida</i>	Method not given	18 hour(s)
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available			
alkyl polyglucoside	EC ₀	> 100	<i>Bacteria</i>	OECD 209	

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol		No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOEC	1 - 10	<i>Not specified</i>	OECD 204	14 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available				
propane-1,2-diol	NOEC	13020	<i>Ceriodaphnia dubia</i>	Method not given	7 day(s)	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside	NOEC	1 - 10	<i>Daphnia sp.</i>	OECD 202		

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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			-	
propane-1,2-diol		No data available			-	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt		No data available				
alkyl polyglucoside		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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			-	
propane-1,2-diol		No data available			-	
alkyl polyglucoside		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			-	
propane-1,2-diol		No data available			-	
alkyl polyglucoside		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			-	
propane-1,2-diol		No data available			-	
alkyl polyglucoside		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			-	
propane-1,2-diol		No data available			-	

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		available				
alkyl polyglucoside		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine		No data available			-	
propane-1,2-diol		No data available			-	
alkyl polyglucoside		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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	Activated sludge, aerobe	Method not given	> 60 % in 28 day(s)	OECD 301A OECD 301B	Readily biodegradable
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt			> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
alkyl polyglucoside	Activated sludge, aerobe	BOD removal	88% in 28 day(s)	OECD 301D	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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available			
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available			
alkyl polyglucoside	≤ 0.07	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs., compds. with isopropanolamine	No data available				
propane-1,2-diol	No data available				
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available				
alkyl polyglucoside	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
benzenesulphonic acid, 2(or 4)-C10-14-alkyl derivs.,	No data available				

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compds. with isopropanolamine					
propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water
Alcohols, C12-14 (even numbered), ethoxylated (<=2.5 moles EO), sulfated, monoisopropanolamine salt	No data available				
alkyl polyglucoside	1.7		Method not given		

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**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 and the IBC Code:** Non-dangerous goods**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

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classification

Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by Safework Australia.

Inventory listing(s)

Australian Inventory of Industrial Chemicals: All components are listed on the inventory, or are exempt.

SECTION 16: Other information

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

SDS code: MS31000468**Version:** 01.2**Revision:** 2020-09-16**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

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repeated use is necessary.

Work practices - solvents: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

Exposure standards - Time Weighted Average (TWA) or Workplace Exposure Standard (WES) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

Personal protective equipment guidelines: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Health effects from exposure: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Safety Data Sheet which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations and acronyms:

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

End of Safety Data Sheet