Safety Data Sheet

SUMA BIO-FLOOR PLUS
No-Rinse Probiotic Floor Cleaner and Deodorizer

Revision: 2022-07-11 **Version:** 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier
Product name: SUMA BIO-FLOOR PLUS
No-Rinse Probiotic Floor Cleaner and Deodorizer

1.2 Recommended use and restrictions on use
Identified uses:
Deodorising floor cleaner. This product is intended to be diluted prior to use.
Restrictions of use:
Uses other than those identified are not recommended

1.3 Details of the supplier
DIVERSEY NEW ZEALAND LTD.
24 Bancroft Crescent, Glendene, Auckland, 0602, New Zealand
Telephone: 0800 803 615 (toll free)

Website: www.diversey.com

1.4 Emergency telephone number
Seek medical advice (show the label or safety data sheet where possible)
Call 0800 243 622 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin corrosion, Category 1C
Serious eye damage, Category 1
Acute aquatic toxicity, Category 1
Chronic aquatic toxicity, Category 2

2.2 Label elements

Signal word: Danger

Hazard statements:
H314 - Causes severe skin burns and eye damage.
H410 - Very toxic to aquatic life with long lasting effects.

Prevention statement(s):
P233 - Keep container tightly closed.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P280 - Wear protective gloves, protective clothing and eye or face protection.

Response statement(s):
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTRE, doctor or physician.
P321 - Specific treatment (see supplemental first aid instructions on this label).
P363 - Wash contaminated clothing before reuse.

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 (% w/w): 0.26

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
Alcohols, C12-14-secondary, ethoxylated	84133-50-6		10-30
alkyl alcohol ethoxylate	68439-46-3	[4]	10-30
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	68956-79-6	273-318-2	3-10
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	68391-01-5	269-919-4	3-10
fatty acids, C8-18 and C18-unsaturated	67701-05-7	266-929-0	1-3
alkyl alcohol ethoxylate	68439-46-3	[4]	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.

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information: If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

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

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician. 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. 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. 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 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)

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
Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

6.2 Environmental precautions
Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. 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
Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
No special precautions required.

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

Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.
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:

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 (AS/NZS 1337.1). 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 (AS/NZS 2161.10). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).

Respiratory protection: No special requirements under normal use conditions.

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

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 0.26

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: No special requirements under normal use conditions.
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: Hazy , Green	
Odour: Surfactant	
Odour threshold: Not applicable	
pH: ≈ 8.8 (neat)	ISO 4316
Dilution pH: ≈ 9.35 (0.26 %)	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): > 93 °C	closed cup
Sustained combustion: Not applicable.	
(UN Manual of Tests and Criteria, section 32, L.2)	
Evaporation rate: Not determined	Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids	
Lower and upper explosion limit/flammability limit (%): Not determined	
Vapour pressure: Not determined	
Relative vapour density No data available	Not relevant to classification of this product
Relative density: ≈ 1.01 (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: ≈ 67 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 Weight of evidence

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
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): >2000
ATE - Dermal (mg/kg): >2000

Skin irritation and corrosivity
Result: Skin corrosive 1C **Method:** Weight of Evidence

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)
Alcohols, C12-14-secondary, ethoxylated		No data available			
alkyl alcohol ethoxylate	LD_{50}	1400	Rat	Weight of evidence	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		304.5			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	LD_{50}	304.5	Rat	Method not given	
fatty acids, C8-18 and C18-unsaturated	LD_{50}	> 5000	Rat	OECD 401 (EU B.1) Read across	
alkyl alcohol ethoxylate	LD_{50}	> 2000			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
Alcohols, C12-14-secondary, ethoxylated		No data available			
alkyl alcohol ethoxylate	LD_{50}	2000 - 5000	Rat	Weight of evidence	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	LD_{50}	930	Rat	Method not given	
fatty acids, C8-18 and C18-unsaturated	LD_{50}	> 2000	Rabbit	OECD 434 Read across	
alkyl alcohol ethoxylate		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14-secondary, ethoxylated		No data available			
alkyl alcohol ethoxylate		No data available			
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	LC_{50}	0.054		Method not given	
fatty acids, C8-18 and C18-unsaturated	LC_{50}	> 0.1521	Rat	Read across	4
alkyl alcohol ethoxylate		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14-secondary, ethoxylated	Irritant			
alkyl alcohol ethoxylate	Not irritant		Weight of evidence	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
fatty acids, C8-18 and C18-unsaturated	Irritant		OECD 404 (EU B.4) Read across	
alkyl alcohol ethoxylate	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14-secondary, ethoxylated	Severe damage			
alkyl alcohol ethoxylate	Severe damage	Rabbit	Weight of evidence OECD 437	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
fatty acids, C8-18 and C18-unsaturated	Irritant		OECD 405 (EU B.5) Read across	
alkyl alcohol ethoxylate	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14-secondary, ethoxylated	No data available			
alkyl alcohol ethoxylate	No data available			
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
fatty acids, C8-18 and C18-unsaturated	No data available			
alkyl alcohol ethoxylate	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
Alcohols, C12-14-secondary, ethoxylated	No data available			
alkyl alcohol ethoxylate	Not sensitising		Weight of evidence	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
fatty acids, C8-18 and C18-unsaturated	Not sensitising		Read across	
alkyl alcohol ethoxylate	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14-secondary, ethoxylated	No data available			
alkyl alcohol ethoxylate	No data available			
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
fatty acids, C8-18 and C18-unsaturated	No data available			

alkyl alcohol ethoxylate	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)
Alcohols, C12-14-secondary, ethoxylated	No data available		No data available	
alkyl alcohol ethoxylate	No evidence for mutagenicity, negative test results	OECD 473	No data available	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available		No data available	
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No evidence for genotoxicity, weight of evidence	Weight of evidence	No evidence for mutagenicity	Weight of evidence
fatty acids, C8-18 and C18-unsaturated	No evidence for mutagenicity	OECD 471 (EU B.12/13) Read across	No data available	
alkyl alcohol ethoxylate	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
Alcohols, C12-14-secondary, ethoxylated	No data available
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No evidence for carcinogenicity, weight-of-evidence
fatty acids, C8-18 and C18-unsaturated	No data available
alkyl alcohol ethoxylate	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
Alcohols, C12-14-secondary, ethoxylated			No data available				
alkyl alcohol ethoxylate	NOAEL		> 250	Rat	Not known		No effects on fertility No developmental toxicity
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides			No data available				
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides			No data available				
fatty acids, C8-18 and C18-unsaturated	NOAEL	Developmental toxicity Teratogenic effects	600		OECD 421/422 Read across		
alkyl alcohol ethoxylate			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
Alcohols, C12-14-secondary, ethoxylated		No data available				
alkyl alcohol ethoxylate	NOAEL	80 - 400		OECD 408 (EU B.26)		
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
fatty acids, C8-18 and C18-unsaturated	NOAEL	1000	Rat	OECD 422, oral		
alkyl alcohol ethoxylate		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
Alcohols, C12-14-secondary, ethoxylated		No data available				
alkyl alcohol ethoxylate	NOAEL	80		OECD 411 (EU	90	

				B.28)		
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
fatty acids, C8-18 and C18-unsaturated		No data available				
alkyl alcohol ethoxylate		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
Alcohols, C12-14-secondary, ethoxylated		No data available				
alkyl alcohol ethoxylate		No data available				
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
fatty acids, C8-18 and C18-unsaturated		No data available				
alkyl alcohol ethoxylate		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
Alcohols, C12-14-secondary, ethoxylated			No data available					
alkyl alcohol ethoxylate			No data available					
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides			No data available					
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides			No data available					
fatty acids, C8-18 and C18-unsaturated			No data available					
alkyl alcohol ethoxylate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
Alcohols, C12-14-secondary, ethoxylated	No data available
alkyl alcohol ethoxylate	No data available
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	Not applicable
fatty acids, C8-18 and C18-unsaturated	No data available
alkyl alcohol ethoxylate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
Alcohols, C12-14-secondary, ethoxylated	No data available
alkyl alcohol ethoxylate	No data available
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	Not applicable
fatty acids, C8-18 and C18-unsaturated	No data available
alkyl alcohol ethoxylate	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3.

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)
Alcohols, C12-14-secondary, ethoxylated	LC_{50}	No data available			
alkyl alcohol ethoxylate	LC_{50}	5 - 7	*Fish*	92/69/EEC, C1, semi-static	96
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
fatty acids, C8-18 and C18-unsaturated	LC_{50}	5	*Oryzias latipes*	OECD 203 (EU C.1) Read across	96
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14-secondary, ethoxylated	EC_{50}	3.1	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
alkyl alcohol ethoxylate	EC_{50}	5.3	*Daphnia*	92/69/EEC	48
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
fatty acids, C8-18 and C18-unsaturated	EC_{50}	3.6	*Daphnia magna Straus*	OECD 202 (EU C.2) Read across	48
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14-secondary, ethoxylated		No data available			
alkyl alcohol ethoxylate	EC_{50}	1.4 - 47	*Not specified*	92/69/EEC	72
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
fatty acids, C8-18 and C18-unsaturated	EC_{50}	7.6	*Pseudokirchneriella subcapitata*	OECD 201, static	echa
alkyl alcohol ethoxylate		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
Alcohols, C12-14-secondary, ethoxylated		No data available			
alkyl alcohol ethoxylate		No data available			
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
fatty acids, C8-18 and C18-unsaturated		No data available			
alkyl alcohol ethoxylate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time

Alcohols, C12-14-secondary, ethoxylated		No data available			
alkyl alcohol ethoxylate	EC_{50}	> 140	*Bacteria*	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
fatty acids, C8-18 and C18-unsaturated		No data available			
alkyl alcohol ethoxylate		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Alcohols, C12-14-secondary, ethoxylated		No data available				
alkyl alcohol ethoxylate	EC_{10}	8.983	*Not specified*	Method not given	21 day(s)	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
fatty acids, C8-18 and C18-unsaturated		No data available				
alkyl alcohol ethoxylate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Alcohols, C12-14-secondary, ethoxylated		No data available				
alkyl alcohol ethoxylate	EC_{10}	2.579	*Daphnia sp.*	Method not given	21 day(s)	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
fatty acids, C8-18 and C18-unsaturated	NOEC	0.31	*Daphnia magna*	OECD 211 Read across	21 day(s)	
alkyl alcohol ethoxylate		No data available				

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

Terrestrial toxicity

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if 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

Alcohols, C12-14-secondary, ethoxylated			> 60 % in 28 day(s)	OECD 301F	Readily biodegradable
alkyl alcohol ethoxylate				OECD 301B	Readily biodegradable
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides					Not readily biodegradable.
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides				Method not given	Readily biodegradable
fatty acids, C8-18 and C18-unsaturated			> 60% in 30 day(s)	OECD 301D	Readily biodegradable
alkyl alcohol ethoxylate	Activated sludge, aerobe				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
Alcohols, C12-14-secondary, ethoxylated	3.3 - 4.4			
alkyl alcohol ethoxylate	3.11 - 4.19	Method not given	High potential for bioaccumulation	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	3.91	Method not given		
fatty acids, C8-18 and C18-unsaturated	No data available			
alkyl alcohol ethoxylate	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
Alcohols, C12-14-secondary, ethoxylated	No data available				
alkyl alcohol ethoxylate	< 500		Method not given	High potential for bioaccumulation	
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available				
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	182.8		Method not given		
fatty acids, C8-18 and C18-unsaturated	225			Low potential for bioaccumulation	
alkyl alcohol ethoxylate	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
Alcohols, C12-14-secondary, ethoxylated	No data available				
alkyl alcohol ethoxylate	No data available				Potential for mobility in soil, soluble in water
quaternary ammonium compounds, C12-18-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available				
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available				
fatty acids, C8-18 and C18-unsaturated	No data available				Low mobillity in soil
alkyl alcohol ethoxylate	No data available				

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging
Recommendation: Dispose of observing national or local regulations.
Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADG, IMO/IMDG, ICAO/IATA
14.1 UN number: 3267
14.2 UN proper shipping name:
Corrosive liquid, n.o.s. Corrosive liquid, basic, organic, n.o.s. (quaternary ammonium compounds)
14.3 Transport hazard class(es):
Transport hazard class (and subsidiary risks): 8
14.4 Packing group: III
14.5 Environmental hazards:
Environmentally hazardous: Yes
Marine pollutant: Yes
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
IMO/IMDG
EmS: F-A, S-B

This product has been classified, labelled and package in accordance with the requirements of the NZ Land Transport Rule: Dangerous Goods, ADG, and the provisions of the IMDG Code.
Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

HSNO Approval Number	HSR002526.
Group standard	Cleaning Products (Corrosive) Group Standard 2020
Inventory Listing(s)	New Zealand: NZIoC (New Zealand Inventory of Chemicals) All components are listed on the NZIoC inventory, or are exempt
HSNO Classification	8.2C - Corrosive to dermal tissue 8.3A - Corrosive to ocular tissue 9.1A - Very ecotoxic in the aquatic environment

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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Abbreviations and acronyms:
• ATE - Acute Toxicity Estimate
• AUH - Non GHS hazard statement
• DNEL - Derived No Effect Limit
• EC No. - European Community Number
• EC50 - effective concentration, 50%
• LC50 - Lethal Concentration, 50% / Median Lethal Concentration
• LD50 - Lethal Dose, 50% / Median Lethal dose

- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PNEC - Predicted No Effect Concentration
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)

End of Safety Data Sheet