



Safety Data Sheet

SUMA GRILL GEL D9.4

Revision: 2019-02-19

Version: 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SUMA GRILL GEL D9.4

1.2 Recommended use and restrictions on use

Identified uses:

Oven and grill cleaner

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

Fax: + 64 9 813 9801

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

HSNO Classification

6.1D - Acutely toxic (oral)

8.1A - Corrosive to metals

8.2B - Corrosive to dermal tissue

8.3A - Corrosive to ocular tissue

9.1B - Ecotoxic in the aquatic environment

GHS Equivalent Classification

Acute toxicity, oral, Category 4

Corrosive to metals, Category 1

Skin corrosion, Category 1B

Acute aquatic toxicity, Category 2

2.2 Label elements



Signal word: Danger

Hazard statements:

H314 - Causes severe skin burns and eye damage.

H302 - Harmful if swallowed.

H401 - Toxic to aquatic life.

H290 - May be corrosive to metals.

Prevention statement(s):

P233 - Keep container tightly closed.

P234 - Keep only in original packaging.

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):

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P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P301 + P312 - IF SWALLOWED: Call a POISON CENTRE, doctor or physician if you feel unwell.
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 - Immediately call a POISON CENTRE, doctor or physician.
 P321 - Specific treatment (see supplemental first aid instructions on this label).
 P330 - Rinse mouth.
 P363 - Wash contaminated clothing before reuse.
 P390 - Absorb spillage to prevent material damage.

Storage statement(s):

P405 - Store locked up.
 P406 - Store in corrosive-resistant container with a resistant inner liner.

Disposal statement(s):

P501 - Dispose of unused content as chemical waste.

2.3 Other hazards

No other hazards known.

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

Ingredient(s)	CAS number	EC number	Weight percent
sodium hydroxide	1310-73-2	215-185-5	3-10
alkyl alcohol ethoxylate	64425-86-1	[4]	3-10
sodium alkylethersulphate	68585-34-2	[4]	3-10
2-(2-ethoxyethoxy)ethanol	111-90-0	203-919-7	1-3
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	931-292-6	1-3

Non-hazardous ingredients are the remainder and add up to 100%.

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. Get medical attention or advice if you feel unwell.

Self-protection of first aider:

Consider personal protective equipment as indicated in subsection 8.2.

First aid facilities:

Shower and 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

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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

2R

2 - Fine water spray

R - Liquid-tight chemical protective clothing and breathing apparatus. Dilute.

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. 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 onto dry sand or similar inert material.

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 skin and eyes. Do not eat, drink or smoke when using this product. 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:

Ingredient(s)	Long term value(s)	Short term value(s)	Ceiling value(s)
sodium hydroxide			2 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

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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. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.
Appropriate organisational controls:	Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment	
Eye / face protection:	Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.
Hand protection:	Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature. Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.
Body protection:	Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
Respiratory protection:	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>	
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: Opaque, White	
Odour: Product specific	
Odour threshold: Not applicable	
pH: ≈ 13.5 (neat)	ISO 4316
Dilution pH: Not measured	
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. (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	
Upper/lower flammability limit (%): Not determined	
Vapour pressure: Not determined	
Vapour density: Not determined	Not relevant to classification of this product
Relative density: ≈ 1.1 (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	
Explosive properties: Not explosive.	
Oxidising properties: Not oxidising	

9.2 Other information

Surface tension (N/m): Not determined	
Corrosion to metals: 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

Reacts with 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): 6100

ATE - Dermal (mg/kg): >2000

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

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium hydroxide		No data available			
alkyl alcohol ethoxylate	LD ₅₀	> 2000	Rat	Method not given	
sodium alkylethersulphate	LD ₅₀	> 2000	Rat	OECD 401 (EU B.1)	
2-(2-ethoxyethoxy)ethanol	LD ₅₀	5540	Rat	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD ₅₀	> 300 - 2000	Rat	OECD 401 (EU B.1)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium hydroxide	LD ₅₀	1350	Rabbit	Method not given	
alkyl alcohol ethoxylate		No data available			
sodium alkylethersulphate	LD ₅₀	> 2000	Rat	OECD 402 (EU B.3)	
2-(2-ethoxyethoxy)ethanol	LD ₅₀	5940	Rat	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD ₅₀	> 5000	Rat	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide		No data available			
alkyl alcohol ethoxylate		No data available			
sodium alkylethersulphate		No data available			
2-(2-ethoxyethoxy)ethanol	LC ₀	> 5.24 (mist)	Rat	OECD 403 (EU B.2)	8
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	

alkyl alcohol ethoxylate	Irritant	Rabbit	Method not given	
sodium alkylethersulphate	Irritant	Rabbit	OECD 404 (EU B.4)	
2-(2-ethoxyethoxy)ethanol	No data available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	
sodium alkylethersulphate	Severe damage	Rabbit	OECD 405 (EU B.5)	
2-(2-ethoxyethoxy)ethanol	No data available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
alkyl alcohol ethoxylate	No data available			
sodium alkylethersulphate	No data available			
2-(2-ethoxyethoxy)ethanol	No data available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hydroxide	Not sensitising		Human repeated patch test	
alkyl alcohol ethoxylate	No data available			
sodium alkylethersulphate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT Read across	
2-(2-ethoxyethoxy)ethanol	Not sensitising		Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
alkyl alcohol ethoxylate	No data available			
sodium alkylethersulphate	No data available			
2-(2-ethoxyethoxy)ethanol	No data available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
alkyl alcohol ethoxylate	No data available		No data available	
sodium alkylethersulphate	No evidence for mutagenicity, negative test results	OECD 476 (Chinese Hamster Ovary)	No evidence for mutagenicity, negative test results	
2-(2-ethoxyethoxy)ethanol	No data available		No data available	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
alkyl alcohol ethoxylate	No data available
sodium alkylethersulphate	No evidence for carcinogenicity, negative test results
2-(2-ethoxyethoxy)ethanol	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
alkyl alcohol ethoxylate			No data				

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sodium alkylethersulphate	NOAEL	Developmental toxicity	available 86.6	Rat	OECD 416, (EU B.35), oral		No known significant effects or critical hazards
2-(2-ethoxyethoxy)ethanol			No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOAEL	Teratogenic effects	25	Rat	Non guideline test		

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		No data available				
sodium alkylethersulphate	NOAEL	50		Method not given		
2-(2-ethoxyethoxy)ethanol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOAEL	13		OECD 422, oral		

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		No data available				
sodium alkylethersulphate	NOEL	> 12.5		Method not given		
2-(2-ethoxyethoxy)ethanol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		No data available				
sodium alkylethersulphate		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium hydroxide			No data available					
alkyl alcohol ethoxylate			No data available					
sodium alkylethersulphate			No data available					
2-(2-ethoxyethoxy)ethanol			No data available					
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
alkyl alcohol ethoxylate	No data available
sodium alkylethersulphate	No data available
2-(2-ethoxyethoxy)ethanol	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
alkyl alcohol ethoxylate	No data available

sodium alkylethersulphate	No data available
2-(2-ethoxyethoxy)ethanol	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available

Aspiration hazard

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

Potential adverse health effects and symptoms

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

SECTION 12: Ecological information**12.1 Toxicity**

No data is available on the mixture.

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

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	LC ₅₀	35	<i>Various species</i>	Method not given	96
alkyl alcohol ethoxylate	LC ₅₀	1 - 10	<i>Brachydanio rerio</i>	Method not given	96
sodium alkylethersulphate	LC ₅₀	1 - 10	<i>Brachydanio rerio</i>	OECD 203, semi-static	96
2-(2-ethoxyethoxy)ethanol	LC ₅₀	> 100	<i>Pimephales promelas</i>	Method not given	96
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LC ₅₀	> 2.67 - 3.46	<i>Fish</i>	OECD 203, static	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC ₅₀	40.4	<i>Ceriodaphnia sp.</i>	Method not given	48
alkyl alcohol ethoxylate	EC ₅₀	0.1 - 1	<i>Not specified</i>	Method not given	48
sodium alkylethersulphate	EC ₅₀	1 - 10	<i>Daphnia</i>	OECD 202, static	48
2-(2-ethoxyethoxy)ethanol	EC ₅₀	1982	<i>Daphnia magna Straus</i>	Method not given	48
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC ₅₀	3.1	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC ₅₀	22	<i>Photobacterium phosphoreum</i>	Method not given	0.25
alkyl alcohol ethoxylate	EC ₅₀	0.1 - 1	<i>Desmodesmus subspicatus</i>	Method not given	72
sodium alkylethersulphate	EC ₅₀	7.5	<i>Not specified</i>	DIN 38412, Part 9	72
2-(2-ethoxyethoxy)ethanol		No data available			-
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC ₅₀	0.1428	<i>Not specified</i>	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium hydroxide		No data available			-
alkyl alcohol ethoxylate		No data available			-
sodium alkylethersulphate		No data available			-
2-(2-ethoxyethoxy)ethanol		No data available			-
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium hydroxide		No data available			
alkyl alcohol ethoxylate	EC ₁₀	> 10000	<i>Pseudomonas</i>	Method not given	16 hour(s)

			<i>putida</i>		
sodium alkylethersulphate	EC ₁₀	300 - 500		Method not given	0.5 hour(s)
2-(2-ethoxyethoxy)ethanol	EC ₅₀	> 5000		Method not given	16 hour(s)
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC ₁₀	> 24	<i>Bacteria</i>	Non guideline test	18 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		No data available				
sodium alkylethersulphate	NOEC	0.1 - 0.13	<i>Not specified</i>	Method not given	365 day(s)	
2-(2-ethoxyethoxy)ethanol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOEC	0.42	<i>Not specified</i>		302 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hydroxide		No data available				
alkyl alcohol ethoxylate	NOEC	> 0.1-<1	<i>Not specified</i>	Weight of evidence		
sodium alkylethersulphate	NOEC	0.18 - 0.72	<i>Daphnia sp.</i>	Method not given	21 day(s)	
2-(2-ethoxyethoxy)ethanol		No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOEC	0.7	<i>Daphnia magna</i>	Method not given	21 day(s)	

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

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium alkylethersulphate	NOEC	0.72 - 0.9		Method not given	3	
2-(2-ethoxyethoxy)ethanol		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			-	

Terrestrial toxicity

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium alkylethersulphate		No data available			-	
2-(2-ethoxyethoxy)ethanol		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium alkylethersulphate		No data available			-	
2-(2-ethoxyethoxy)ethanol		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium alkylethersulphate		No data available			-	
2-(2-ethoxyethoxy)ethanol		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium alkylethersulphate		No data available			-	
2-(2-ethoxyethoxy)ethanol		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium alkylethersulphate		No data available			-	
2-(2-ethoxyethoxy)ethanol		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		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
sodium hydroxide	13 second(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
sodium hydroxide					Not applicable (inorganic substance)
alkyl alcohol ethoxylate	Activated sludge, aerobe	DOC reduction	90 - 100%	OECD 301A	Readily biodegradable
sodium alkylethersulphate			> 60 % in 28 day(s)	Method not given	Readily biodegradable
2-(2-ethoxyethoxy)ethanol			90 % in 28 day(s)	OECD 301E	Readily biodegradable
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		CO ₂ production	90% in 28 day(s)	OECD 301B	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 K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	
alkyl alcohol ethoxylate	-		No bioaccumulation expected	
sodium alkylethersulphate	0.95 - 3.9	Method not given	Low potential for bioaccumulation	
2-(2-ethoxyethoxy)ethanol	-0.8	Method not given	No bioaccumulation expected	

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Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0.93	(EC) 440/2008, A.8	No bioaccumulation expected	
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Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hydroxide	No data available				
alkyl alcohol ethoxylate	No data available				
sodium alkylethersulphate	No data available				
2-(2-ethoxyethoxy)ethanol	No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
sodium hydroxide	No data available				Mobile in soil
alkyl alcohol ethoxylate	No data available				Potential for adsorption to soil
sodium alkylethersulphate	No data available				
2-(2-ethoxyethoxy)ethanol	No data available				High potential for mobility in soil
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available				Low mobility in soil

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: 1824

14.2 UN proper shipping name:

Sodium hydroxide solution

14.3 Transport hazard class(es):

14.4 Packing group: II

14.5 Environmental hazards:

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.

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

Other relevant information:

Hazchem code: 2R

IMO/IMDG

EmS: F-A, S-B

This product has been classified, labelled and packaged 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 2017

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: MS32000338**Version:** 01.0**Revision:** 2019-02-19

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
- LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 - effective concentration, 50%
- NOEL - No observed effect level
- NOAEL - No observed adverse effect level
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)
- EC No. - European Community Number
- OECD - Organization for Economic Cooperation and Development

End of Safety Data Sheet