

Safety Data Sheet

SUMA ELIMINEX J-FLEX

Revision: 2018-10-04

Version: 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SUMA ELIMINEX J-FLEX

1.2 Recommended use and restrictions on use Identified uses: Drain 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

Call 0800 243 622 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

HSNO Classification

- 6.5B Contact sensitisers
- 8.1A Corrosive to metals
- 8.2C Corrosive to dermal tissue
- 8.3A Corrosive to ocular tissue

9.1A - Very ecotoxic in the aquatic environment

GHS Equivalent Classification

Skin sensitisation, Category 1 Corrosive to metals, Category 1 Skin corrosion, Category 1C Acute aquatic toxicity, Category 1

2.2 Label elements



Signal word: Danger

Hazard statements:

- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H400 Very toxic to aquatic life.
- H290 May be corrosive to metals.

Prevention statement(s):

- P233 Keep container tightly closed.
- P234 Keep only in original packaging.
- P260 Do not breathe vapours or spray.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- 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.

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.

2.4 Classification diluted product:

Recommended maximum concentration (%): 5

HSNO Classification

6.3B - Mildly irritating to the skin 9.1D - Slightly harmful to the aquatic environment or are otherwise designed for biocidal action

GHS Equivalent Classification

Skin irritation, Category 3 Acute aquatic toxicity, Category 3

2.5 Label elements diluted product

H316 - Causes mild skin irritation.

H402 - Harmful to aquatic life.

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
sodium hypochlorite	7681-52-9	231-668-3	3-10
disodium disilicate	1344-09-8	215-687-4	1-3
N,N-dimethyltetradecylamine N-oxide	3332-27-2	222-059-3	1-3
potassium hydroxide	1310-58-3	215-181-3	1-3
Sodium chlorate	7775-09-9	231-887-4	1-3
sodium xylene sulphonate	1300-72-7	215-090-9	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.
Self-protection of first aider: First aid facilities:	Consider personal protective equipment as indicated in subsection 8.2. 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. May cause an allergic skin reaction.
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

Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Ensure adequate ventilation.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions: No special precautions required.

Measures to prevent aerosol and dust generation:

Avoid formation of aerosol.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Take off contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe vapours or spray. 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)
potassium 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 <u>undiluted</u> 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
Appropriate organisational controls:	contact, the personal protection equipment as described in this section is not required. Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment	
Eye / face protection:	Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.
Hand protection:	Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature. Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.
Body protection:	Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
Respiratory protection:	Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.

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

Recommended safety measures for handling the <u>diluted</u> product:

Recommended maximum concentration (%): 5

Appropriate engineering controls: Appropriate organisational controls:	Use only in well ventilated areas. Ensure that foam equipment does not generate respirable particles. Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment Eye / face protection: Hand protection:	Safety glasses or goggles (EN 166) are always recommended for foam applications. Chemical-resistant protective gloves (EN 374) are always recommended for foam applications. 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 In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.
Body protection: Respiratory protection:	No special requirements under normal use conditions. Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.
Environmental exposure controls:	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 Appearance: Aqueous solution Colour: Hazy, Yellow Odour: Product specific Odour threshold: Not applicable **pH:** ≈ 12.7 (neat) Dilution pH: \approx 11 (1%) Melting point/freezing point (°C): Not determined Initial boiling point and boiling range (°C): Not determined Flammability (liquid): Not flammable. Flash point (°C): > 93.3 Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2) Evaporation rate: Not determined Flammability (solid, gas): Not applicable to liquids Upper/lower flammability limit (%): Not determined Vapour pressure: Not determined Vapour density: Not determined Relative density: ≈ 1.1197 (20 °C) Solubility in / Miscibility with Water: Fully miscible Partition coefficient: n-octanol/water No information available. Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3 Autoignition temperature: Not determined Decomposition temperature: Not applicable. Viscosity: ≈ 32 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: Corrosive 0.00 %P

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): >5000

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 hypochlorite	LD 50	> 1100	Rat		90
disodium disilicate	LD 50	3400	Rat	Method not given	
N,N-dimethyltetradecylamine N-oxide	LD 50	> 300-2000	Rat	OECD 401 (EU B.1)	
potassium hydroxide	LD 50	333	Rat	OECD 425	
Sodium chlorate		No data available			

ISO 4316 ISO 4316 Not relevant to classification of this product

closed cup

Not relevant to classification of this product

Not relevant to classification of this product OECD 109 (EU A.3)

Weight of evidence

sodium xylene sulphonate LD 50 > 7200 Rat Method not given
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Acute dermal toxicity					
Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium hypochlorite	LD 50	> 20000	Rabbit	OECD 402 (EU B.3)	
disodium disilicate	LD 50	> 5000	Rat	Method not given	
N,N-dimethyltetradecylamine N-oxide		No data available			
potassium hydroxide		No data available			
Sodium chlorate		No data available			
sodium xylene sulphonate	LD 50	> 2000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hypochlorite	LC 50	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1
disodium disilicate	LC 50	> 2.06 No mortality observed	Rat	Non guideline test	
N,N-dimethyltetradecylamine N-oxide		No data available			
potassium hydroxide		No data available			
Sodium chlorate		No data available			
sodium xylene sulphonate	LC o	> 6.41 (mist)	Rat	Method not given	4

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite	Corrosive	Rabbit	OECD 404 (EU B.4)	
disodium disilicate	Irritant		Method not given	
N,N-dimethyltetradecylamine N-oxide	Irritant	Rabbit	OECD 404 (EU B.4)	
potassium hydroxide	Corrosive	Rabbit	Draize test	
Sodium chlorate	No data available			
sodium xylene sulphonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite	Severe damage	Rabbit	OECD 405 (EU B.5)	
disodium disilicate	Severe damage		Method not given	
N,N-dimethyltetradecylamine N-oxide	Severe damage	Rabbit	OECD 405 (EU B.5)	
potassium hydroxide	Corrosive	Rabbit	Method not given	
Sodium chlorate	No data available			
sodium xylene sulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite	Irritating to			
	respiratory tract			
disodium disilicate	Irritating to		Method not given	
	respiratory tract			
N,N-dimethyltetradecylamine N-oxide	No data available			
potassium hydroxide	No data available			
Sodium chlorate	No data available			
sodium xylene sulphonate	No data available			

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hypochlorite	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
	5	5 1 1 5	Buehler test	
disodium disilicate	Not sensitising		Method not given	
N,N-dimethyltetradecylamine N-oxide	No data available			
potassium hydroxide	Not sensitising	Guinea pig	Method not given	
Sodium chlorate	No data available			
sodium xylene sulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite	No data available			
disodium disilicate	No data available			
N,N-dimethyltetradecylamine N-oxide	No data available			
potassium hydroxide	No data available			
Sodium chlorate	No data available			
sodium xylene sulphonate	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 hypochlorite	No evidence for mutagenicity		No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
disodium disilicate	No evidence for mutagenicity, negative test results		No data available	
N,N-dimethyltetradecylamine N-oxide	No data available		No data available	
potassium hydroxide	No evidence for mutagenicity, negative test results	Method not given	No data available	
Sodium chlorate	No data available		No data available	
sodium xylene sulphonate	No evidence for mutagenicity, negative test results		No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
sodium hypochlorite	No evidence for carcinogenicity, negative test results
disodium disilicate	No evidence for carcinogenicity, negative test results
N,N-dimethyltetradecylamine N-oxide	No data available
potassium hydroxide	No evidence for carcinogenicity, negative test results
Sodium chlorate	No data available
sodium xylene sulphonate	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 hypochlorite	NOAEL	Developmental toxicity Impaired fertility	5 (CI)	Rat	OECD 414 (EU B.31), oral OECD 415 (EU B.34), oral		No evidence for reproductive toxicity
disodium disilicate			No data available				No evidence for reproductive toxicity
N,N-dimethyltetradecyl amine N-oxide			No data available				
potassium hydroxide			No data available				No evidence for reproductive toxicity
Sodium chlorate			No data available				
sodium xylene sulphonate	NOAEL	Teratogenic effects	> 936	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 hypochlorite	NOAEL	50	Rat	OECD 408 (EU B.26)	90	
disodium disilicate	NOAEL	> 159	Rat	Method not given	180	No effects observed
N,N-dimethyltetradecylamine N-oxide		No data available				
potassium hydroxide		No data available				
Sodium chlorate		No data available				
sodium xylene sulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B 26)	90	

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sodium hypochlorite		No data				
		available				
disodium disilicate		No data				
		available				
N,N-dimethyltetradecylamine N-oxide		No data				
		available				

potassium hydroxide		No data			
		available			
Sodium chlorate		No data			
		available			
sodium xylene sulphonate	NOAEL	> 440	OECD 411 (EU	90	
			B.28)		

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hypochlorite		No data available				
disodium disilicate		No data available				
N,N-dimethyltetradecylamine N-oxide		No data available				
potassium hydroxide		No data available				
Sodium chlorate		No data available				
sodium xylene sulphonate		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 hypochlorite			No data available					
disodium disilicate			No data available					
N,N-dimethyltetradecyl amine N-oxide			No data available					
potassium hydroxide			No data available					
Sodium chlorate			No data available					
sodium xylene sulphonate	Oral		No data available	Rat	OECD 453 (EU B.33)	24 month(s)	No adverse effects observed	

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium hypochlorite	Not applicable
disodium disilicate	No data available
N,N-dimethyltetradecylamine N-oxide	No data available
potassium hydroxide	No data available
Sodium chlorate	No data available
sodium xylene sulphonate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium hypochlorite	Not applicable
disodium disilicate	Not applicable
N,N-dimethyltetradecylamine N-oxide	No data available
potassium hydroxide	No data available
Sodium chlorate	No data available
sodium xylene sulphonate	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 hypochlorite	LC 50	0.06	Oncorhynchus	Method not given	96

			mykiss		
disodium disilicate	LC 50	1108	Brachydanio rerio	Method not given	96
N,N-dimethyltetradecylamine N-oxide	LC 50	1-10	Brachydanio rerio	OECD 203 (EU C.1)	96
potassium hydroxide	LC 50	80	Various species	Method not given	24
Sodium chlorate		No data available			
sodium xylene sulphonate	LC 50	> 1000	Fish	EPA-OPPTS 850.1075	96

Aquatic short-term toxicity - crustacea	

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hypochlorite	EC 50	0.035	Ceriodaphnia dubia	OECD 202 (EU C.2)	48
disodium disilicate	EC 50	1700	Daphnia magna Straus	Method not given	48
N,N-dimethyltetradecylamine N-oxide	EC 50	> 1-10	Daphnia magna Straus	OECD 202 (EU C.2)	48
potassium hydroxide	EC 50	30 - 1000	Daphnia magna Straus	Method not given	-
Sodium chlorate		No data available			
sodium xylene sulphonate	EC 50	> 1000	Daphnia	EPA-OPPTS 850.1010	48

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hypochlorite	NOEC	0.0021	Not specified	Method not given	168
disodium disilicate	EC 50	207	Desmodesmus subspicatus	Method not given	72
N,N-dimethyltetradecylamine N-oxide	EC 50	0.47	Pseudokirchner iella subcapitata	OECD 201 (EU C.3) Read across	72
potassium hydroxide		No data available			-
Sodium chlorate		No data available			
sodium xylene sulphonate	EC 50	> 230	Not specified	EPA OPPTS 850.5400	96

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium hypochlorite	EC 50	0.026	Crassostrea virginica	Method not given	2
disodium disilicate		No data available			-
N,N-dimethyltetradecylamine N-oxide		No data available			-
potassium hydroxide		No data available			-
Sodium chlorate		No data available			
sodium xylene sulphonate		No data available			-

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium hypochlorite		0.375	Activated sludge	Method not given	
disodium disilicate		No data available			
N,N-dimethyltetradecylamine N-oxide	EC 50	56	Pseudomonas putida	DIN 38412 / Part 8 Read across	
potassium hydroxide	EC 50	22	Photobacteriu m phosphoreum	Method not given	15 minute(s)
Sodium chlorate		No data available			
sodium xylene sulphonate	E r C 50	> 1000	Activated sludge	OECD 209	3 hour(s)

Aquatic long-term toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
sodium hypochlorite	NOEC	0.04	Menidia	Method not	96 hour(s)	
			pelinsulae	given		
disodium disilicate	NOEC	348	Brachydanio	Method not	96 hour(s)	

		rerio	given	
N,N-dimethyltetradecylamine N-oxide	No data			
	available			
potassium hydroxide	No data			
	available			
Sodium chlorate	No data			
	available			
sodium xylene sulphonate	No data			
	available			

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hypochlorite		No data available				
disodium disilicate		No data available				
N,N-dimethyltetradecylamine N-oxide		No data available				
potassium hydroxide		No data available				
Sodium chlorate		No data available				
sodium xylene sulphonate		No data available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium hypochlorite		No data available			-	
disodium disilicate		No data available			-	
N,N-dimethyltetradecylamine N-oxide		No data available			-	
potassium hydroxide		No data available			-	
Sodium chlorate		No data available				
sodium xylene sulphonate		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 hypochlorite		No data available			-	
disodium disilicate		No data available			-	
N,N-dimethyltetradecylamine N-oxide		No data available			-	
potassium hydroxide		No data available			-	
sodium xylene sulphonate		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium hypochlorite		No data available			-	
disodium disilicate		No data available			-	
N,N-dimethyltetradecylamine N-oxide		No data available			-	
potassium hydroxide		No data available			-	
sodium xylene sulphonate		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
					time (days)	
sodium hypochlorite		No data			-	
		available				
disodium disilicate		No data			-	
		available				
N,N-dimethyltetradecylamine N-oxide		No data			-	

	available			
potassium hydroxide	No data		-	
	available			
sodium xylene sulphonate	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 hypochlorite		No data available			-	
disodium disilicate		No data available			-	
N,N-dimethyltetradecylamine N-oxide		No data available			-	
potassium hydroxide		No data available			-	
sodium xylene sulphonate		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 hypochlorite		No data available			-	
disodium disilicate		No data available			-	
N,N-dimethyltetradecylamine N-oxide		No data available			-	
potassium hydroxide		No data available			-	
sodium xylene sulphonate		No data available			-	

12.2 Persistence and degradability

Abiotic degradation - photodegradation in air, if available:

rolotic degradation photodegradation in all, if a	valiabic.			
Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium hypochlorite	115 day(s)	Indirect photo-oxidation		

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 hypochlorite					Not applicable (inorganic substance)
disodium disilicate					Not applicable (inorganic substance)
N,N-dimethyltetradecylamine N-oxide	Activated sludge, aerobe	CO ₂ production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
potassium hydroxide					Not applicable (inorganic substance)
Sodium chlorate					Not applicable (inorganic substance)
sodium xylene sulphonate			99.8 % in 28 day(s)	OECD 301F	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)

Fartilion coefficient n-octanol/water (log i				
Ingredient(s)	Value	Method	Evaluation	Remark
sodium hypochlorite	-3.42	Method not given	No bioaccumulation expected	
disodium disilicate	No data available		Low potential for bioaccumulation	
N,N-dimethyltetradecylamine N-oxide	No data available		No bioaccumulation expected	
potassium hydroxide	No data available		Not relevant, does not bioaccumulate	
Sodium chlorate	No data available			
sodium xylene sulphonate	-3.12	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hypochlorite	No data available				
disodium disilicate	No data available				
N,N-dimethyltetradecyl amine N-oxide	No data available				
potassium hydroxide	No data available				
Sodium chlorate	No data available				
sodium xylene sulphonate	No data available				

12.4 Mobility in soil

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sodium hypochlorite	1.12				High potential for mobility in soil
disodium disilicate	No data available				
N,N-dimethyltetradecylamine N-oxide	No data available				
potassium hydroxide	No data available				Low potential for adsorption to soil
Sodium chlorate	No data available				
sodium xylene sulphonate	No data available				

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

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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



Land transport, Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

- 14.1 UN number: 3266
- 14.2 UN proper shipping name:
- Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide, hypochlorite)
- 14.3 Transport hazard class(es): Transport hazard class (and subsidiary risks): 8
- 14.4 Packing group: III
- 14.5 Environmental hazards:
 - Marine pollutant: Not available

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

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: MS32000147

Version: 01.0

Revision: 2018-10-04

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