Safety Data Sheet

SUMA ELIMINEX J-FLEX

Revision: 2023-09-09 **Version:** 01.1

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: 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

Serious eye damage, Category 1
Skin irritation, Category 2
Acute aquatic toxicity, Category 1
Chronic aquatic toxicity, Category 2
Corrosive to metals, Category 1

2.2 Label elements

Signal word: Danger

Hazard statements:
H290 - May be corrosive to metals.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H410 - Very toxic to aquatic life with long lasting effects.
AUH031 - Contact with acids liberates toxic gas.

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.
P260 - Do not breathe dust, fume, gas, mist, vapours or spray.
P280 - Wear protective gloves, protective clothing and eye or face protection.

Response statement(s):
P332 + P313 - If skin irritation occurs: Get medical advice or attention.
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).
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P362 + P364 - Take off contaminated clothing and wash it 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 (% w/w): 5

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS#	EC number	Weight percent
sodium hypochlorite (active chlorine)	7681-52-9	231-668-3	3-10
sodium silicate	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 xylene sulphonate	1300-72-7	215-090-9 / 701-037-1	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

Inhalation: Get medical attention or advice if you feel unwell.
Skin contact: Wash skin with plenty of lukewarm, gently flowing water. 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. 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: Eyewash facilities should be considered in a workplace where necessary.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause bronchospasm in chlorine sensitive individuals.
Skin contact: Causes irritation.
Eye contact: Causes severe or permanent damage.
Ingestion: No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

Poison Information Center: Call 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. Repeated or prolonged contact:. 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). 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 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:

Ingredient(s)	Long term value(s)	Short term value(s)	Ceiling value(s)
potassium hydroxide			2 mg/m³

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).

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): 5

Appropriate engineering controls:	Use only in well ventilated areas. Ensure that foam equipment does not generate respirable particles.
Appropriate organisational controls:	No special requirements under normal use conditions.

Personal protective equipment

Eye / face protection:	Safety glasses or goggles (AS/NZS 1337.1) are always recommended for foam applications.
Hand protection:	Chemical-resistant protective gloves (AS/NZS 2161.10) 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:	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 , Yellow	
Odour: Chlorine	
Odour threshold: Not applicable	
pH: ≈ 12.7 (neat)	ISO 4316
Dilution pH: ≈ 11 (1%)	ISO 4316
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	
Flammability (liquid): Not flammable.	
Flash point (°C): > 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: ≈ 1.12 (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

QATM-V-013/Rev. 002 Viscosity by Rotational Viscometer

Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

9.2 Other information
Surface tension (N/m): Not determined
Corrosion to metals: Corrosive

SECTION 10: Stability and reactivity

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

10.2 Chemical stability
Stable under normal storage and use conditions.

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

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

10.5 Incompatible materials
May be corrosive to metals. Reacts with acids releasing toxic chlorine gas.

10.6 Hazardous decomposition products
Chlorine.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data: .

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000

Skin irritation and corrosivity
Result: Skin irritant 2 **Species:** Not applicable **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)
sodium hypochlorite (active chlorine)	LD_{50}	1100	Rat	OECD 401 (EU B.1)	90
sodium silicate	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 xylene sulphonate	LD_{50}	> 7200	Rat	OECD 401 (EU B.1)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium hypochlorite (active chlorine)	LD_{50}	> 20000	Rabbit	OECD 402 (EU B.3)	
sodium silicate	LD_{50}	> 5000	Rat	Method not given	
N,N-dimethyltetradecylamine N-oxide		No data available			
potassium hydroxide		No data available			
sodium xylene sulphonate	LD_{50}	> 2000	Rabbit	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hypochlorite (active chlorine)	LC_{50}	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1

sodium silicate	LC_{50}	> 2.06	Rat	Method not given	
N,N-dimethyltetradecylamine N-oxide		No data available			
potassium hydroxide		No data available			
sodium xylene sulphonate	LC_{0}	> 6.41 (mist) No mortality observed	Rat	OECD 403 (EU B.2)	4

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite (active chlorine)	Corrosive	Rabbit	OECD 404 (EU B.4)	
sodium silicate	Irritant		Method not given	
N,N-dimethyltetradecylamine N-oxide	Irritant	Rabbit	OECD 404 (EU B.4)	
potassium hydroxide	Corrosive	Rabbit	Draize test	
sodium xylene sulphonate	Mild irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite (active chlorine)	Severe damage	Rabbit	OECD 405 (EU B.5)	
sodium silicate	Irritant		Method not given	
N,N-dimethyltetradecylamine N-oxide	Severe damage	Rabbit	OECD 405 (EU B.5)	
potassium hydroxide	Corrosive	Rabbit	Method not given	
sodium xylene sulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

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

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hypochlorite (active chlorine)	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
sodium silicate	Not sensitising		Method not given	
N,N-dimethyltetradecylamine N-oxide	No data available			
potassium hydroxide	Not sensitising	Guinea pig	Method not given	
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 (active chlorine)	Not sensitising			
sodium silicate	No data available			
N,N-dimethyltetradecylamine N-oxide	No data available			
potassium hydroxide	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 (active chlorine)	No evidence for mutagenicity	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
sodium silicate	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 xylene sulphonate	No evidence for mutagenicity, negative test results	OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
sodium hypochlorite (active chlorine)	No evidence for carcinogenicity, negative test results
sodium silicate	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 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 (active chlorine)	NOAEL	Developmental toxicity Impaired fertility	5 (Cl)	Rat	OECD 414 (EU B.31), oral OECD 415 (EU B.34), oral		No evidence for reproductive toxicity
sodium silicate			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 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 (active chlorine)	NOAEL	50	Rat	OECD 408 (EU B.26)	90	
sodium silicate	NOAEL	> 159	Rat	Method not given		
N,N-dimethyltetradecylamine N-oxide		No data available				
potassium hydroxide		No data available				
sodium xylene sulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B.26)	90	

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hypochlorite (active chlorine)		No data available				
sodium silicate		No data available				
N,N-dimethyltetradecylamine N-oxide		No data available				
potassium hydroxide		No data available				
sodium xylene sulphonate	NOAEL	> 440		OECD 411 (EU B.28)	90	

Sub-chronic inhalation toxicity

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

N,N-dimethyltetradecyl amine N-oxide			No data available					
potassium hydroxide			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 (active chlorine)	Not applicable
sodium silicate	No data available
N,N-dimethyltetradecylamine N-oxide	No data available
potassium hydroxide	No data available
sodium xylene sulphonate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium hypochlorite (active chlorine)	Not applicable
sodium silicate	No data available
N,N-dimethyltetradecylamine N-oxide	No data available
potassium hydroxide	No data available
sodium xylene sulphonate	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)
sodium hypochlorite (active chlorine)	LC_{50}	0.06	*Oncorhynchus mykiss*	Method not given	96
sodium silicate	LC_{50}	260 - 310	*Oncorhynchus mykiss*	Method not given	96
N,N-dimethyltetradecylamine N-oxide	LC_{50}	1-10	*Brachydanio rerio*	OECD 203, semi-static	96
potassium hydroxide	LC_{50}	80	*Various species*	Weight of evidence	24
sodium xylene sulphonate	LC_{50}	> 1000	*Oncorhynchus mykiss*	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hypochlorite (active chlorine)	EC_{50}	0.035	*Ceriodaphnia dubia*	OECD 202 (EU C.2)	48
sodium silicate	EC_{50}	1700	*Daphnia magna Straus*	OECD 202, static	48
N,N-dimethyltetradecylamine N-oxide	EC_{50}	> 1-10	*Daphnia magna Straus*	OECD 202, static	48
potassium hydroxide	EC_{50}	30 - 1000	*Daphnia magna Straus*	Weight of evidence	
sodium xylene sulphonate	EC_{50}	> 1000	*Daphnia*	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hypochlorite (active chlorine)	NOEC	0.0021	*Not specified*	Method not given	168
sodium silicate	EC_{50}	207	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72
N,N-dimethyltetradecylamine N-oxide	EC_{50}	0.19	*Pseudokirchneriella*	Read across	72

			subcapitata		
potassium hydroxide		No data available			
sodium xylene sulphonate	EC_{50}	> 230	*Not specified*	EPA OPPTS 850.5400	96

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium hypochlorite (active chlorine)	EC_{50}	0.026	*Crassostrea virginica*	Method not given	2
sodium silicate		No data available			
N,N-dimethyltetradecylamine N-oxide		No data available			
potassium hydroxide		No data available			
sodium xylene sulphonate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium hypochlorite (active chlorine)		0.375	*Activated sludge*	Method not given	
sodium silicate		No data available			
N,N-dimethyltetradecylamine N-oxide	EC_{50}	56	*Pseudomonas putida*	DIN 38412 / Part 8 Read across	
potassium hydroxide	EC_{50}	22	*Photobacterium phosphoreum*	Method not given	15 minute(s)
sodium xylene sulphonate	$E_r C_{50}$	> 1000	*Activated sludge*	OECD 209	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hypochlorite (active chlorine)	NOEC	0.04	*Menidia pelinsulae*	Method not given	96 hour(s)	
sodium silicate	NOEC	348	*Brachydanio rerio*	Method not given	96 hour(s)	
N,N-dimethyltetradecylamine N-oxide		No data available				
potassium hydroxide		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 (active chlorine)	NOEC	0.007	*Crassostrea virginica*	Method not given	15 day(s)	
sodium silicate		No data available				
N,N-dimethyltetradecylamine N-oxide		No data available				
potassium hydroxide		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 (active chlorine)		No data available				
potassium hydroxide		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 (active chlorine)		No data available				
potassium hydroxide		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 (active chlorine)		No data available				
potassium hydroxide		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hypochlorite (active chlorine)		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 (active chlorine)		No data available				
potassium hydroxide		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 (active chlorine)		No data available				
potassium hydroxide		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 hypochlorite (active chlorine)	115 day(s)	Indirect photo-oxidation		
potassium hydroxide	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium hypochlorite (active chlorine)	No data available			
potassium hydroxide	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
sodium hypochlorite (active chlorine)		No data available			
potassium hydroxide		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
sodium hypochlorite (active chlorine)					Not applicable (inorganic substance)
sodium silicate					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 xylene sulphonate	Activated sludge, aerobe	CO_2 production	99.8 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical	DT_{50}	Method	Evaluation

		method			
sodium hypochlorite (active chlorine)					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
sodium hypochlorite (active chlorine)					No data available
potassium hydroxide					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium hypochlorite (active chlorine)	-3.42	Method not given	No bioaccumulation expected	
sodium silicate	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 xylene sulphonate	-3.12	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hypochlorite (active chlorine)	No data available				
sodium silicate	No data available				
N,N-dimethyltetradecylamine N-oxide	No data available				
potassium hydroxide	No data available				
sodium xylene sulphonate	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
sodium hypochlorite (active chlorine)	1.12				High potential for mobility in soil
sodium silicate	No data available				
N,N-dimethyltetradecylamine N-oxide	No data available				
potassium hydroxide	No data available				Low potential for adsorption to soil
sodium xylene sulphonate	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 or ID 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:
Environmentally hazardous: Yes
Marine pollutant: Yes
14.6 Special precautions for user: None known.
14.7 Maritime transport in bulk according to IMO instruments: 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	HSR002530.
Group standard	Cleaning Products (Subsidiary Hazard) 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	6.3A - Irritating to the skin 8.1A - Corrosive to metals 8.3A - Corrosive to ocular tissue 9.1A - Very ecotoxic in the aquatic environment 9.1B - 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