Safety Data Sheet

CREW BATHROOM CLEANER & SCALE REMOVER J-FLEX

Revision: 2023-03-26 **Version:** 01.1

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier
Product name: CREW BATHROOM CLEANER & SCALE REMOVER J-FLEX

1.2 Recommended use and restrictions on use
Identified uses:
Bathroom cleaner and scale remover
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

Acute toxicity, oral, Category 4
Skin irritation, Category 2
Skin sensitisation, Category 1
Serious eye damage, Category 1
Acute aquatic toxicity, Category 2
Soil environment, Category 3

2.2 Label elements

Signal word: Danger

Hazard statements:
H302 - Harmful if swallowed.
H318 - Causes serious eye damage.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H401 - Toxic to aquatic life.
H423 - Harmful to the soil environment.

Prevention statement(s):
P233 - Keep container tightly closed.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
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 + P312 - IF SWALLOWED: Call a POISON CENTRE, doctor or physician if you feel unwell.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

P332 + P313 - If skin irritation occurs: Get medical advice or attention.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTRE, doctor or physician.
P321 - Specific treatment (see supplemental first aid instructions on this label).
P330 - Rinse mouth.
P362 - Take off contaminated clothing.

Disposal statement(s):
P501 - Dispose of unused content as chemical waste.

2.3 Other hazards
No other hazards known.

2.4 Classification diluted product:
Recommended maximum concentration (% w/w): 5.6

Skin irritation, Category 3
Eye irritation, Category 2A
Acute aquatic toxicity, Category 3

2.5 Label elements diluted product

Signal word: Warning.

Hazard statements:
H316 - Causes mild skin irritation.
H319 - Causes serious eye irritation.
H402 - Harmful to aquatic life.

Precautionary statements:
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice or attention.
P501 - Dispose of unused content as chemical waste.

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS#	EC number	Weight percent
potassium alkylbenzenesulphonate	85480-57-5	287-337-9	10-30
alkyl alcohol ethoxylate	64425-86-1	[4]	3-10
benzyl alcohol	100-51-6	202-859-9	3-10
2-(2-ethoxyethoxy)ethanol	111-90-0	203-919-7	3-10
Citric acid	77-92-9	201-069-1	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

General Information: Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident.

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

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice or attention. If skin irritation occurs: Get medical advice or attention.

Eye contact:	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.
Ingestion:	Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Call a POISON CENTRE, doctor or physician. 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:	No known effects or symptoms in normal use.
Skin contact:	Causes irritation. May cause an allergic skin reaction.
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
None allocated

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions
Do not allow to enter drainage system, surface or ground water. 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
Absorb with liquid-binding material (sand, diatomite, universal binders).

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 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. Contaminated work clothing should not be allowed out of the workplace. 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:

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: No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 5.6

Appropriate engineering controls: Use only in well ventilated areas.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

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: 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Method / remark
Physical state: Liquid	
Colour: Clear , Purple	
Odour: Product specific	
Odour threshold: Not applicable	
pH: ≈ 4 (neat)	ISO 4316
Dilution pH: > 3 (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): > 93.4 °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 Not determined — Not relevant to classification of this product
Relative density: ≈ 1.07 (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: ≈ 33 mPa.s (20 °C)
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

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

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 alkali. Keep away from products containing chlorine-based bleaching agents or sulphites.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): 1500
ATE - Dermal (mg/kg): >5000
ATE - Inhalatory, mists (mg/l): >5

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)
potassium alkylbenzenesulphonate		1080			
alkyl alcohol ethoxylate		No data available			
benzyl alcohol	LD_{50}	1200	Rat	Method not given	

2-(2-ethoxyethoxy)ethanol	LD_{50}	5540	Rat	Method not given	
Citric acid	LD_{50}	5400-11700	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
potassium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
benzyl alcohol	LD_{50}	> 2000	Rabbit	Method not given	
2-(2-ethoxyethoxy)ethanol	LD_{50}	5940	Rat	Method not given	
Citric acid	LD_{50}	> 2000	Rat	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
potassium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
benzyl alcohol	LC_{50}	> 4 (mist)	Rat	OECD 403 (EU B.2)	4
2-(2-ethoxyethoxy)ethanol	LC_{0}	> 5.24 (mist)	Rat	OECD 403 (EU B.2)	8
Citric acid		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
potassium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
benzyl alcohol	No data available			
2-(2-ethoxyethoxy)ethanol	No data available			
Citric acid	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
potassium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
benzyl alcohol	Irritant		Method not given	
2-(2-ethoxyethoxy)ethanol	No data available			
Citric acid	Severe damage Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
potassium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
benzyl alcohol	No data available			
2-(2-ethoxyethoxy)ethanol	No data available			
Citric acid	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
potassium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
benzyl alcohol	Not sensitising		Method not given	
2-(2-ethoxyethoxy)ethanol	Not sensitising		Method not given	
Citric acid	Not sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
potassium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
benzyl alcohol	Not sensitising			

2-(2-ethoxyethoxy)ethanol	No data available			
Citric acid	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)
potassium alkylbenzenesulphonate	No data available		No data available	
alkyl alcohol ethoxylate	No data available		No data available	
benzyl alcohol	No data available		No data available	
2-(2-ethoxyethoxy)ethanol	No data available		No data available	
Citric acid	No data available		No evidence of genotoxicity, negative test results	Method not given

Carcinogenicity

Ingredient(s)	Effect
potassium alkylbenzenesulphonate	No data available
alkyl alcohol ethoxylate	No data available
benzyl alcohol	No data available
2-(2-ethoxyethoxy)ethanol	No data available
Citric acid	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
potassium alkylbenzenesulphonate			No data available				
alkyl alcohol ethoxylate			No data available				
benzyl alcohol			No data available				
2-(2-ethoxyethoxy)ethanol			No data available				
Citric acid			No data available				No evidence for reproductive toxicity

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
potassium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
benzyl alcohol		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Citric acid		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
potassium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
benzyl alcohol		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Citric acid		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
potassium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
benzyl alcohol		No data				

		available				
2-(2-ethoxyethoxy)ethanol		No data available				
Citric acid		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
potassium alkylbenzenesulphonate			No data available					
alkyl alcohol ethoxylate			No data available					
benzyl alcohol			No data available					
2-(2-ethoxyethoxy)ethanol			No data available					
Citric acid			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
potassium alkylbenzenesulphonate	No data available
alkyl alcohol ethoxylate	No data available
benzyl alcohol	Not applicable
2-(2-ethoxyethoxy)ethanol	No data available
Citric acid	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
potassium alkylbenzenesulphonate	No data available
alkyl alcohol ethoxylate	No data available
benzyl alcohol	Not applicable
2-(2-ethoxyethoxy)ethanol	No data available
Citric acid	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)
potassium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
benzyl alcohol	LC_{50}	460	*Fish*	Method not given	96
2-(2-ethoxyethoxy)ethanol	LC_{50}	> 100	*Pimephales promelas*	Method not given	96
Citric acid	LC_{50}	440	*Leuciscus idus*	Method not given	48

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
potassium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
benzyl alcohol	EC_{50}	230	*Daphnia*	Method not given	48

			magna Straus		
2-(2-ethoxyethoxy)ethanol	EC_{50}	1982	*Daphnia magna Straus*	Method not given	48
Citric acid	EC_{50}	1535	*Daphnia magna Straus*	Method not given	24

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
potassium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
benzyl alcohol	EC_{50}	640	*Scenedesmus quadricauda*	Method not given	96
2-(2-ethoxyethoxy)ethanol	EC_{50}	14861	*Pseudokirchneriella subcapitata*	Method not given	72
Citric acid	LC_{50}	425	*Scenedesmus quadricauda*	Method not given	168

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
potassium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
benzyl alcohol		No data available			
2-(2-ethoxyethoxy)ethanol		No data available			
Citric acid		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
potassium alkylbenzenesulphonate		No data available			
alkyl alcohol ethoxylate		No data available			
benzyl alcohol		No data available			
2-(2-ethoxyethoxy)ethanol	EC_{50}	> 5000		Method not given	16 hour(s)
Citric acid	EC_{50}	> 10000	*Pseudomonas putida*	Method not given	16 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
potassium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
benzyl alcohol		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Citric acid		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
potassium alkylbenzenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
benzyl alcohol		No data available				
2-(2-ethoxyethoxy)ethanol		No data available				
Citric acid		No data available				

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

Terrestrial toxicity

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Citric acid		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
Citric acid		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
Citric acid	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
Citric acid	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
Citric acid		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
potassium alkylbenzenesulphonate	Activated sludge, aerobe	CO_2 production	> 89% 89% in 29 day(s)	Weight of evidence OECD 301B	Readily biodegradable
alkyl alcohol ethoxylate				OECD 301B	Readily biodegradable
benzyl alcohol		Method not given	95 - 97% % in 21 day(s)	Method not given	Readily biodegradable
2-(2-ethoxyethoxy)ethanol			90 % in 28 day(s)	OECD 301E	Readily biodegradable
Citric acid			97 % in 28 day(s)	Method not given OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
Citric acid					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
Citric acid					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
potassium alkylbenzenesulphonate	No data available			
alkyl alcohol ethoxylate	-		No bioaccumulation expected	
benzyl alcohol	1.05	Method not given	Low potential for bioaccumulation	
2-(2-ethoxyethoxy)ethanol	-0.8	Method not given	No bioaccumulation expected	
Citric acid	-1.72		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
potassium alkylbenzenesulphonate	No data available				
alkyl alcohol ethoxylate	No data available				
benzyl alcohol	No data available			Low potential for bioaccumulation	
2-(2-ethoxyethoxy)ethanol	No data available				
Citric acid	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
potassium alkylbenzenesulphonate	No data available				
alkyl alcohol ethoxylate	No data available				
benzyl alcohol	No data available				Potential for mobility in soil, soluble in water
2-(2-ethoxyethoxy)ethanol	No data available				High potential for mobility in soil
Citric acid	No data available				Potential for mobility in soil, soluble in water

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: Non-dangerous goods
14.2 UN proper shipping name: Non-dangerous goods
14.3 Transport hazard class(es): Non-dangerous goods
14.4 Packing group: Non-dangerous goods
14.5 Environmental hazards: Non-dangerous goods
14.6 Special precautions for user: Non-dangerous goods
14.7 Maritime transport in bulk according to IMO instruments: Non-dangerous goods

Other relevant information:

Hazchem code: None allocated

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	6.1D - Acutely toxic (oral) 6.3A - Irritating to the skin 6.5B - Contact sensitisers 8.3A - Corrosive to ocular tissue 9.1D - Slightly harmful to the aquatic environment or are otherwise designed for biocidal action 9.2C - Harmful in the soil 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

SDS code: MS32000438 **Version:** 01.1 **Revision:** 2023-03-26

Abbreviations and acronyms:
- DNEL - Derived No Effect Limit
- AUH - Non GHS 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 - Organisation for Economic Cooperation and Development

End of Safety Data Sheet