

Safety Data Sheet

SUN DISHWASHER POWDER - SUNSHINE LEMON

Revision: 2018-07-06 **Version:** 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SUN DISHWASHER POWDER - SUNSHINE LEMON Sun is a registered trade mark and is used under licence of Unilever

1.2 Recommended use and restrictions on use

Identified uses:
Dishmachine detergent
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

6.1E - Acutely toxic (oral)

6.1E - Acutely toxic (inhalation)

6.3A - Irritating to the skin

8.3A - Corrosive to ocular tissue

9.1D - Slightly harmful to the aquatic environment or are otherwise designed for biocidal action

GHS Equivalent Classification

Acute toxicity, oral, Category 5 Acute toxicity, inhalation, Category 5 Skin irritation, Category 2 Serious eye damage, Category 1 Acute aquatic toxicity, Category 3

2.2 Label elements



Signal word: Danger

Hazard statements:

H303 - May be harmful if swallowed.

H333 - May be harmful if inhaled.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H402 - Harmful to aquatic life.

Prevention statement(s):

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P233 - Keep container tightly closed.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P280 - Wear protective gloves, protective clothing and eye or face protection.

Response statement(s):

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).

P362 - Take off contaminated clothing.

Disposal statement(s):

P501 - Dispose of unused content as chemical waste.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
sodium carbonate	497-19-8	207-838-8	10-30
pentasodium triphosphate	7758-29-4	231-838-7	10-30
sodium percarbonate	15630-89-4	239-707-6	3-10
disodium disilicate	1344-09-8	215-687-4	3-10
alkyl alcohol alkoxylate	120313-48-6	Polymer*	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: 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. 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: No known effects or symptoms in normal use.

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

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. 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

Collect mechanically.

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. Keep out of reach of children. 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. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with 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. Keep out of reach of children.

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:

Appropriate engineering controls: No special requirements under normal use conditions.

Avoid direct contact and/or splashes where possible. Train personnel. Appropriate organisational controls:

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166).

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

Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may **Body protection:**

occur (EN ISO 13982-1).

Method / remark

Not applicable to solids or gases

No special requirements under normal use conditions. Respiratory protection:

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

Physical State: Solid Appearance: Powder Colour: White

Odour: Product specific Odour threshold: Not applicable

pH: Not applicable.

Dilution pH: < 11

Melting point/freezing point (°C): Not determined Not relevant to classification of this product

Initial boiling point and boiling range (°C): Not determined Not applicable to solids or gases

Flash point (°C): Not applicable. Sustained combustion: Not applicable.

(UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined Not relevant to classification of this product

Flammability (solid, gas): Not applicable to liquids Upper/lower flammability limit (%): Not determined

Vapour pressure: Not determined Vapour density: Not determined

Not relevant to classification of this product Relative density: Not determined

Solubility in / Miscibility with Water: Soluble

Partition coefficient: n-octanol/water No information available. Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Autoignition temperature: Not determined Decomposition temperature: Not applicable.

Viscosity: Not determined

Explosive properties: Not explosive. Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals: Not determined Not applicable to solids or gases

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

None known under normal use conditions.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): 3600 ATE - Inhalatory, mists (mg/l): 5.4

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

Acute toxicity Acute oral toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/kg)			time (h)
sodium carbonate	LD 50	2800	Rat	Method not given	
pentasodium triphosphate	LD₀	> 2000	Rat	OECD 401 (EU B.1)	
sodium percarbonate	LD 50	1034	Rat	Method not given	
disodium disilicate	LD 50	3400	Rat	Method not given	
alkyl alcohol alkoxylate	LD 50	> 2000	Rat	Method not given	

Acute dermal toxicity

Acute dermai toxicity	cute definal toxicity								
Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)				
sodium carbonate	LD 50	> 2000	Rabbit	Method not given					
pentasodium triphosphate	LD 50	> 4640	Rabbit	Method not given					
sodium percarbonate	LD 50	> 2000	Rabbit	OECD 402 (EU B.3)					
disodium disilicate	LD 50	> 5000	Rat	Method not given					
alkyl alcohol alkoxylate		No data available							

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC 50	2.3 (dust)	Rat	OECD 403 (EU B.2)	2
pentasodium triphosphate	LC ₀	0.39 (dust)	Rat	EPA OPP 81-3	4
sodium percarbonate		No data available			
disodium disilicate		No mortality observed	Rat	Non guideline test	
alkyl alcohol alkoxylate		No data available			

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Not irritant		Method not given	
pentasodium triphosphate	riphosphate Not irritant		OECD 404 (EU B.4)	
sodium percarbonate	Not irritant	Rabbit	Method not given	
disodium disilicate	Irritant		Method not given	
alkyl alcohol alkoxylate	Irritant	Rabbit Draize test		

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	Method not given	
pentasodium triphosphate	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
sodium percarbonate	Severe damage	Rabbit	EPA OPP 81-4	
disodium disilicate	Severe damage		Method not given	
alkyl alcohol alkoxylate	Not corrosive or irritant	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
pentasodium triphosphate	No data available			
sodium percarbonate	Irritating to respiratory tract	Mouse	Method not given	
disodium disilicate	Irritating to respiratory tract		Method not given	
alkyl alcohol alkoxylate	No data available			

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
pentasodium triphosphate	Not sensitising	Mouse	OECD 429 (EU B.42)	
sodium percarbonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
disodium disilicate	Not sensitising		Method not given	
alkyl alcohol alkoxylate	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
pentasodium triphosphate	No data available			
sodium percarbonate	No data available			
disodium disilicate	No data available			
alkyl alcohol alkoxylate	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) $\underline{\text{Mutagenicity}}$

ividiagementy				
Ingredient(s)	Result (in-vitro)	Method	Result (in-vivo)	Method
		(in-vitro)		(in-vivo)
sodium carbonate	No data available		No data available	
pentasodium triphosphate	No evidence for mutagenicity, negative test results		No evidence of genotoxicity, negative test results	OECD 475 (EU B.11)
sodium percarbonate	No data available		No data available	
disodium disilicate	No evidence for mutagenicity, negative test results		No data available	
alkyl alcohol alkoxylate	No data available		No data available	

Carcinogenicity

Carcinogenicity	
Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
pentasodium triphosphate	No evidence for carcinogenicity, negative test results
sodium percarbonate	No data available
disodium disilicate	No evidence for carcinogenicity, negative test results
alkyl alcohol alkoxylate	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium carbonate			No data available				
pentasodium triphosphate	NOAEL	Developmental toxicity	141	Rat	Not known		No evidence for reproductive toxicity
sodium percarbonate			No data available				
disodium disilicate			No data available				No evidence for reproductive toxicity
alkyl alcohol alkoxylate			No data available				

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	
sodium carbonate		No data available				
pentasodium triphosphate		No data available				
sodium percarbonate		No data available				
disodium disilicate	NOAEL	> 159	Rat	Method not given	180	No effects observed
alkyl alcohol alkoxylate		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
sodium carbonate		No data available				
pentasodium triphosphate		No data available				
sodium percarbonate		No data available				
disodium disilicate		No data available				
alkyl alcohol alkoxylate		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data				
		available				
pentasodium triphosphate		No data				

	available		
sodium percarbonate	No data		
	available		
disodium disilicate	No data		
	available		
alkyl alcohol alkoxylate	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 carbonate			No data available					
pentasodium triphosphate	Oral	NOAEL	225	Rat	Equivalent of OECD 412 (EU B.8)			
sodium percarbonate			No data available					
disodium disilicate			No data available					
alkyl alcohol alkoxylate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
pentasodium triphosphate	No data available
sodium percarbonate	No data available
disodium disilicate	No data available
alkyl alcohol alkoxylate	No data available

STOT-repeated exposure

5101-lepealed exposure	
Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
pentasodium triphosphate	No data available
sodium percarbonate	No data available
disodium disilicate	Not applicable
alkyl alcohol alkoxylate	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 carbonate	LC 50	300	Lepomis macrochirus	Method not given	96
pentasodium triphosphate	LC 50	1850	Brachydanio rerio	Method not given	24
sodium percarbonate	LC 50	70.7	Pimephales promelas	Method not given	96
disodium disilicate	LC 50	260 - 310	Oncorhynchus mykiss	Method not given	96
alkyl alcohol alkoxylate	LC 50	1 - 10	Leuciscus idus	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC 50	265	Daphnia	Method not given	96
			magna Straus		
pentasodium triphosphate	EC 50	> 100	Daphnia	40 CFR 797.1930	48
			magna Straus		
sodium percarbonate	EC 50	4.9	Daphnia pulex	Method not given	48

disodium disilicate	EC 50	1700	Daphnia	Method not given	48
			magna Straus		
alkyl alcohol alkoxylate	EC 50	1	Not specified	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate		No data available			-
pentasodium triphosphate	EC 50	160	Desmodesmus subspicatus	ISO/TC147/SC5/WG5 N84	96
sodium percarbonate		No data available			=
disodium disilicate	EC 50	207	Desmodesmus subspicatus	Method not given	72
alkyl alcohol alkoxylate	EC 50	0.1 - 1	Not specified	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			-
pentasodium triphosphate		No data available			-
sodium percarbonate		No data available			-
disodium disilicate		No data available			-
alkyl alcohol alkoxylate		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium carbonate		No data available			
pentasodium triphosphate		No data available			
sodium percarbonate	EC 50	466	Activated sludge	OECD 209	0.5 hour(s)
disodium disilicate		No data available			
alkyl alcohol alkoxylate		1000	Activated sludge	DIN EN ISO 8192-OECD 209-88/302/EEC	

Aquatic long-term toxicity Aquatic long-term toxicity - fish

	Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
	sodium carbonate		No data available				
p	entasodium triphosphate	LOEC	5		OECD 212	96 hour(s)	
	sodium percarbonate	NOEC	7.4	Pimephales promelas	Method not given	96 hour(s)	
	disodium disilicate	NOEC	348	Brachydanio rerio	Method not given	96 hour(s)	
	alkyl alcohol alkoxylate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
pentasodium triphosphate		No data available				
sodium percarbonate	NOEC	2	Daphnia pulex	Method not given	48 hour(s)	
disodium disilicate		No data available		-		
alkyl alcohol alkoxylate	NOEC	0.25	Daphnia magna	Method not	21 day(s)	

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

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data			-	
		available				

pentasodium triphosphate	No data	-	
	available		
sodium percarbonate	No data	-	
	available		
disodium disilicate	No data	-	
	available		
alkyl alcohol alkoxylate	No data	-	
	available		

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
pentasodium triphosphate		No data available			-	
sodium percarbonate		No data available			-	
disodium disilicate		No data available			-	
alkyl alcohol alkoxylate		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
pentasodium triphosphate		No data available			-	
sodium percarbonate		No data available			-	
disodium disilicate		No data available			-	
alkyl alcohol alkoxylate		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
pentasodium triphosphate		No data available			-	
sodium percarbonate		No data available			-	
disodium disilicate		No data available			-	
alkyl alcohol alkoxylate		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 carbonate		No data available			-	
pentasodium triphosphate		No data available			-	
sodium percarbonate		No data available			-	
disodium disilicate		No data available			-	
alkyl alcohol alkoxylate		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 carbonate		No data available			-	
pentasodium triphosphate		No data available			-	
sodium percarbonate		No data available			-	
disodium disilicate		No data available			-	
alkyl alcohol alkoxylate		No data			-	

	available		

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Method	Evaluation	Remark	
sodium percarbonate	NA	Method not given		

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium carbonate	No data available		Rapidly hydrolysible	
sodium percarbonate	< 1 day(s)	Method not given	Hydrolysible	

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
pentasodium triphosphate					Not applicable (inorganic substance)
sodium percarbonate					Not applicable (inorganic substance)
disodium disilicate					Not applicable (inorganic substance)
alkyl alcohol alkoxylate		CO ₂ production	> 60% in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium carbonate	No data available		No bioaccumulation expected	
pentasodium triphosphate	No data available			
sodium percarbonate	No data available			
disodium disilicate	No data available		Low potential for bioaccumulation	
alkyl alcohol alkoxylate	No data available		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
pentasodium triphosphate	No data available				
sodium percarbonate	No data available				
disodium disilicate	No data available				
alkyl alcohol alkoxylate	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 carbonate	No data available				Potential for mobility in soil, soluble in water
pentasodium triphosphate	No data available				
sodium percarbonate	No data available				High potential for mobility in soil
disodium disilicate	No data available				
alkyl alcohol alkoxylate	No data available				Potential for adsorption to soil

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Waste from residues / unused products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging

material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

SECTION 14: Transport information

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

14.1 UN 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 Transport in bulk according to Annex II of MARPOL and the IBC Code: 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.

Cleaning Products (Subsidiary Hazard) Group Standard 2017 **Group standard** 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: MS32000377 Version: 01.0 Revision: 2018-07-06

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