

Safety Data Sheet

PERSIL LAUNDRY POWDER

Revision: 2019-06-20 **Version:** 01.1

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: PERSIL LAUNDRY POWDER

Persil is a registered trade mark and is used under licence of Unilever

1.2 Recommended use and restrictions on use

Identified uses: Laundry powder 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

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

9.3C - Harmful to terrestrial vertebrates

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 2 Terrestrial vertebrates, Category 3

2.2 Label elements



Signal word: Danger

Hazard statements:

H333 - May be harmful if inhaled.

H303 - May be harmful if swallowed.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H401 - Toxic to aquatic life.

H433 - Harmful to terrestrial vertebrates.

Prevention statement(s):

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
sodium alkylbenzenesulphonate	68411-30-3	270-115-0	10-30
sodium silicate	1344-09-8	215-687-4	3-10
sodium percarbonate	15630-89-4	239-707-6	3-10
Alcohols, C12-18, ethoxylated	68213-23-0	500-201-8	1-3
starch	9005-25-8	232-679-6	1-3
silicon dioxide	7631-86-9	231-545-4	1-3
sodium hypochlorite	7681-52-9	231-668-3	0.01-0.1

[4] Polymer

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. 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 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)
starch	10 mg/m ³		
silicon dioxide	0.1 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 $\underline{\textit{undiluted}}$ product:

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

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

Personal protective equipment

Eye / face protection:

Safety glasses or goggles (EN 166).

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.

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

occur (EN ISO 13982-1).

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

Method / remark

closed cup

OECD 109 (EU A.3)

Physical State: Solid Appearance: Powder Colour: White
Odour: Perfumed

Odour threshold: Not applicable pH: Not applicable. (neat)

ISO 4316 **Dilution pH:** ≈ 11 (1%)

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

Flammability (liquid): Not applicable.

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

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

Evaporation rate: Not determined Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Vapour pressure: Not determined

Vapour density: Not determined

Relative density: $\approx 0.72 (20 \,^{\circ}\text{C})$

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

Not applicable to solids or gases

Not relevant to classification of this product

Not relevant to classification of this product

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

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): 3500 ATE - Dermal (mg/kg): >5000 ATE - Inhalatory, mists (mg/l): 7.9

Skin irritation and corrosivity

Result: Skin irritant 2 Method: Classified according to NZ HSNO Regulations

Eye irritation and corrosivity

Method: Classified according to NZ HSNO Regulations **Result:** Eye damage 1

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 carbonate	LD 50	2800	Rat	Method not given	
sodium alkylbenzenesulphonate	LD 50	1080	Rat	OECD 401 (EU B.1)	
sodium silicate	LD 50	3400	Rat	Method not given	
sodium percarbonate	LD 50	1034	Rat	Method not given	
Alcohols, C12-18, ethoxylated		1000	Rat		
starch		No data available			
silicon dioxide		No data available			
sodium hypochlorite	LD 50	> 1100	Rat	OECD 401 (EU B.1)	90

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium carbonate	LD 50	> 2000	Rabbit	Method not given	
sodium alkylbenzenesulphonate	LD 50	> 2000	Rat	OECD 402 (EU B.3)	
sodium silicate	LD 50	> 5000	Rat	Method not given	
sodium percarbonate	LD 50	> 2000	Rabbit	OECD 402 (EU B.3)	
Alcohols, C12-18, ethoxylated		> 2000			
starch		No data available			
silicon dioxide		No data available			
sodium hypochlorite	LD 50	> 20000	Rabbit	OECD 402 (EU B.3)	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC 50	> 2.3 (dust)		Weight of evidence	2
sodium alkylbenzenesulphonate		No data available			
sodium silicate	LC 50	> 2.06 No mortality observed	Rat	Non guideline test	
sodium percarbonate		No data available			
Alcohols, C12-18, ethoxylated		> 5			
starch		No data available			
silicon dioxide		No data available			
sodium hypochlorite	LC 50	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1

Irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
sodium alkylbenzenesulphonate	Irritant	Rabbit	OECD 404 (EU B.4)	
sodium silicate	Irritant		Method not given	
sodium percarbonate	Not irritant	Rabbit	Method not given	
Alcohols, C12-18, ethoxylated	No data available			
starch	No data available			
silicon dioxide	No data available			

sodium hypochlorite	Corrosive	Rabbit	OECD 404 (EU B.4)	
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Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	Method not given	
sodium alkylbenzenesulphonate	Corrosive	Rabbit	OECD 405 (EU B.5)	
sodium silicate	Severe damage		Method not given	
sodium percarbonate	Severe damage	Rabbit	EPA OPP 81-4	
Alcohols, C12-18, ethoxylated	No data available			
starch	No data available			
silicon dioxide	No data available			
sodium hypochlorite	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
sodium alkylbenzenesulphonate	Not irritating to respiratory tract			
sodium silicate	Irritating to respiratory tract		Method not given	
sodium percarbonate	Irritating to respiratory tract	Mouse	Method not given	
Alcohols, C12-18, ethoxylated	No data available			
starch	No data available			
silicon dioxide	No data available			
sodium hypochlorite	Irritating to respiratory tract			

SensitisationSensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
sodium alkylbenzenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
sodium silicate	Not sensitising		Method not given	
sodium percarbonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
Alcohols, C12-18, ethoxylated	No data available			
starch	No data available			
silicon dioxide	No data available			
sodium hypochlorite	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
sodium alkylbenzenesulphonate	No data available			
sodium silicate	No data available			
sodium percarbonate	No data available			
Alcohols, C12-18, ethoxylated	No data available			
starch	No data available			
silicon dioxide	No data available			
sodium hypochlorite	Not sensitising			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

utagenicity				
Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium carbonate	No data available		No data available	
sodium alkylbenzenesulphonate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476 OECD 473	No data available	
sodium silicate	No evidence for mutagenicity, negative test results		No data available	
sodium percarbonate	No data available		No data available	
Alcohols, C12-18, ethoxylated	No data available		No data available	
starch	No data available		No data available	
silicon dioxide	No data available		No data available	
sodium hypochlorite	No evidence for mutagenicity	,	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
sodium alkylbenzenesulphonate	No data available
sodium silicate	No evidence for carcinogenicity, negative test results
sodium percarbonate	No data available
Alcohols, C12-18, ethoxylated	No data available
starch	No data available
silicon dioxide	No data available
sodium hypochlorite	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 carbonate			No data available				
sodium alkylbenzenesulphonat e	NOAEL	Teratogenic effects	300	Rat	Non guideline test		No known significant effects or critical hazards
sodium silicate			No data available				No evidence for reproductive toxicity
sodium percarbonate			No data available				
Alcohols, C12-18, ethoxylated			No data available				
starch			No data available				
silicon dioxide			No data available				
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

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 carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium silicate	NOAEL	> 159	Rat	Method not given	180	No effects observed
sodium percarbonate		No data available				
Alcohols, C12-18, ethoxylated		No data available				
starch		No data available				
silicon dioxide		No data available				
sodium hypochlorite	NOAEL	50	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 carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
sodium silicate		No data available				
sodium percarbonate		No data available				
Alcohols, C12-18, ethoxylated		No data available				
starch		No data available				
silicon dioxide		No data available				
sodium hypochlorite		No data available				

Sub-chronic inhalation toxicity

Sub-cirionic initialation toxicity						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sodium carbonate		No data				
		available				

sodium alkylbenzenesulphonate	No data		
·	available		
sodium silicate	No data		
	available		
sodium percarbonate	No data		
	available		
Alcohols, C12-18, ethoxylated	No data		
	available		
starch	No data		
	available		
silicon dioxide	No data		
	available		
sodium hypochlorite	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					
sodium alkylbenzenesulphonat e			No data available					
sodium silicate			No data available					
sodium percarbonate			No data available					
Alcohols, C12-18, ethoxylated			No data available					
starch			No data available					
silicon dioxide			No data available					
sodium hypochlorite			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium alkylbenzenesulphonate	No data available
sodium silicate	No data available
sodium percarbonate	No data available
Alcohols, C12-18, ethoxylated	No data available
starch	No data available
silicon dioxide	No data available
sodium hypochlorite	Not applicable

STOT-repeated exposure

S101-repeated exposure	
Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium alkylbenzenesulphonate	No data available
sodium silicate	Not applicable
sodium percarbonate	No data available
Alcohols, C12-18, ethoxylated	No data available
starch	No data available
silicon dioxide	No data available
sodium hypochlorite	Not applicable

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	Species	Method	Exposure

		(mg/l)			time (h)
sodium carbonate	LC 50	300	Lepomis macrochirus	Method not given	96
sodium alkylbenzenesulphonate	LC 50	1.67	Fish	EPA-OPPTS 850.1075	96
sodium silicate	LC 50	1108	Brachydanio rerio	Method not given	96
sodium percarbonate	LC 50	70.7	Pimephales promelas	Method not given	96
Alcohols, C12-18, ethoxylated		10-100 [Not a valid number]			
starch		No data available			
silicon dioxide		No data available			
sodium hypochlorite	LC 50	0.06	Oncorhynchus mykiss	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 magna Straus	Method not given	96
sodium alkylbenzenesulphonate	LC 50	2.9	Daphnia	OECD 202 (EU C.2)	48
sodium silicate	EC 50	1700	Daphnia magna Straus	Method not given	48
sodium percarbonate	EC 50	4.9	Daphnia pulex	Method not given	48
Alcohols, C12-18, ethoxylated		10-100 [Not a valid number]			
starch		No data available			
silicon dioxide		No data available			
sodium hypochlorite	EC 50	0.035	Ceriodaphnia dubia	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Ingredient(s) Endpoint Value (mg/l)		Species	Method	Exposure time (h)
sodium carbonate		No data available			-
sodium alkylbenzenesulphonate	E b C 50	47.3	Not specified	Non guideline test	72
sodium silicate	EC 50	207	Desmodesmus subspicatus	Method not given	72
sodium percarbonate		No data available			-
Alcohols, C12-18, ethoxylated		10-100 [Not a valid number]			
starch		No data available			
silicon dioxide		No data available			
sodium hypochlorite	NOEC	0.0021	Not specified	Method not given	168

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			-
sodium alkylbenzenesulphonate		No data available			
sodium silicate		No data available			-
sodium percarbonate		No data available			-
Alcohols, C12-18, ethoxylated		No data available			
starch		No data available			
silicon dioxide		No data available			
sodium hypochlorite	EC 50	0.026	Crassostrea virginica	Method not given	2

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value	Inoculum	Method	Exposure
		(mg/l)			time
sodium carbonate		No data			
		available			
sodium alkylbenzenesulphonate	EC 50	550	Bacteria	OECD 209	3 hour(s)
sodium silicate		No data			
		available			

sodium percarbonate	EC 50	466	Activated sludge	OECD 209	0.5 hour(s)
Alcohols, C12-18, ethoxylated		No data available	J. J		
starch		No data available			
silicon dioxide		No data available			
sodium hypochlorite		0.375	Activated sludge	Method not given	

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
sodium alkylbenzenesulphonate	NOEC	0.23	Oncorhynchus mykiss	Method not given	72 day(s)	
sodium silicate	NOEC	348	Brachydanio rerio	Method not given	96 hour(s)	
sodium percarbonate	NOEC	7.4	Pimephales promelas	Method not given	96 hour(s)	
Alcohols, C12-18, ethoxylated		No data available				
starch		No data available				
silicon dioxide		No data available				
sodium hypochlorite	NOEC	0.04	Menidia pelinsulae	Method not given	96 hour(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
sodium alkylbenzenesulphonate	NOEC	1.41	Daphnia magna	OECD 211		
sodium silicate		No data available				
sodium percarbonate	NOEC	2	Daphnia pulex	Method not given	48 hour(s)	
Alcohols, C12-18, ethoxylated		No data available				
starch		No data available				
silicon dioxide		No data available				
sodium hypochlorite	NOEC	0.007	Crassostrea virginica	Method not given	15 day(s)	

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium alkylbenzenesulphonate		No data available				
sodium silicate		No data available			-	
sodium percarbonate		No data available			-	
Alcohols, C12-18, ethoxylated		No data available				
starch		No data available				
silicon dioxide		No data available				
sodium hypochlorite		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				
sodium silicate		No data available			-	

sodium percarbonate	No data available	-	
sodium hypochlorite	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			-	
sodium silicate		No data available			-	
sodium percarbonate		No data available			-	
sodium hypochlorite		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium silicate		No data available			-	
sodium percarbonate		No data available			-	
sodium hypochlorite		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			-	
sodium silicate		No data available			-	
sodium percarbonate		No data available			-	
sodium hypochlorite		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			-	
sodium silicate		No data available			=	
sodium percarbonate		No data available			=	
sodium hypochlorite		No data available			-	

12.2 Persistence and degradability

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:

Abbitic degradation - photodegradation in air, ii available.										
Ingredient(s)	Half-life time	Method	Evaluation	Remark						
sodium percarbonate	NA	Method not given								
sodium hypochlorite	115 day(s)	Indirect photo-oxidation								

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

Biodegradation

Peady biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
sodium alkylbenzenesulphonate	Activated sludge, aerobe	CO ₂ production	85 % in 28 day(s)	OECD 301B	Readily biodegradable
sodium silicate					Not applicable (inorganic

			substance)
sodium percarbonate			Not applicable (inorganic substance)
Alcohols, C12-18, ethoxylated		OECD 301F	Readily biodegradable
starch			Readily biodegradable
silicon dioxide			Not applicable (inorganic substance)
sodium hypochlorite			Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potentialPartition coefficient p-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium carbonate	No data available		No bioaccumulation expected	
sodium alkylbenzenesulphonate	3.32	Method not given	Low potential for bioaccumulation	
sodium silicate	No data available		Low potential for bioaccumulation	
sodium percarbonate	No data available			
Alcohols, C12-18, ethoxylated	-		No bioaccumulation expected	
starch	No data available			
silicon dioxide	No data available			
sodium hypochlorite	-3.42	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
sodium alkylbenzenesulphonat e	2-1000		Method not given	High potential for bioaccumulation	
sodium silicate	No data available				
sodium percarbonate	No data available				
Alcohols, C12-18, ethoxylated	No data available				
starch	No data available				
silicon dioxide	No data available				
sodium hypochlorite	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
sodium alkylbenzenesulphonate	No data available				
sodium silicate	No data available				
sodium percarbonate	No data available				High potential for mobility in soil
Alcohols, C12-18, ethoxylated	No data available				
starch	No data available				
silicon dioxide	No data available				
sodium hypochlorite	1.12				High potential for mobility in soil

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Waste from residues / unused products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging

Dispose of observing national or local regulations. Recommendation:

SECTION 14: Transport information

ADG, IMO/IMDG, ICAO/IATA

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

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: Non-dangerous goods

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

Non-dangerous goods

Other relevant information: Hazchem code: None allocated

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.

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: MS32000505 Version: 01.1 Revision: 2019-06-20

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