

OPTIMO LAUNDRY POWDER (TOP LOADER)

Revision: 2024-07-31

Version: 01.1

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: OPTIMO LAUNDRY POWDER (TOP LOADER)

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

Serious eye damage, Category 1

Skin irritation, Category 2

2.2 Label elements



Signal word: Danger

Hazard statements:

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

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.

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 + P364 - Take off contaminated clothing and wash it before reuse.

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

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3.1 Substances / Mixtures

Ingredient(s)	CAS#	EC number	Weight percent
pentasodium triphosphate	7758-29-4	231-838-7	10-30
sodium carbonate	497-19-8	207-838-8	10-30
sodium alkylbenzenesulphonate	90194-45-9	290-656-6	3-10
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	931-534-0	3-10
sodium silicate	1344-09-8	215-687-4	3-10

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:	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. Wear eye/face protection. Repeated or prolonged contact: Wear suitable gloves.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water.

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

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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 advised 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:

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.

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 ISO 13982-1).

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**

Physical state: Solid

Appearance: Powder

Colour: White

Odour: Product specific

Odour threshold: Not applicable

pH: Not applicable

Dilution pH: ≈ 11 (10%)

Melting point/freezing point (°C): Not determined

Initial boiling point and boiling range (°C): Not determined

Method / remark

Not relevant to classification of this product
Not applicable to solids or gases

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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
Lower and upper explosion limit/flammability limit (%): Not determined
Vapour pressure: Not determined
Relative density: Not determined
Relative vapour density: No data available.
Particle characteristics: Not determined.
Solubility in / Miscibility with water: Soluble
Partition coefficient: n-octanol/water No information available.

Not relevant to classification of this product

Not applicable to solids
 Not relevant to classification of this product.

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Kinematic viscosity: Not applicable to solids or gases
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

Not applicable to solids or gases

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): >2000
 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)
pentasodium triphosphate	LD ₀₁	> 2000	Rat	OECD 401 (EU B.1)	
sodium carbonate	LD ₅₀	2800	Rat	OECD 401 (EU B.1)	

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sodium alkylbenzenesulphonate	LD ₅₀	> 1470	Rat	OECD 401 (EU B.1)	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LD ₅₀	> 2000	Rat	OECD 401 (EU B.1)	
sodium silicate	LD ₅₀	3400	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
pentasodium triphosphate	LD ₅₀	> 4640	Rabbit	Method not given	
sodium carbonate	LD ₅₀	> 2000	Rabbit	Method not given	
sodium alkylbenzenesulphonate		No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LD ₅₀	6300	Rabbit	OECD 402 (EU B.3)	
sodium silicate	LD ₅₀	> 5000	Rat	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
pentasodium triphosphate	LC ₅₀	0.39 (dust)	Rat	EPA OPP 81-3	4
sodium carbonate	LC ₅₀	> 2.3 (dust)		Weight of evidence	2
sodium alkylbenzenesulphonate		No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LC ₅₀	> 52 (mist)	Rat	OECD 403 (EU B.2)	4
sodium silicate	LC ₅₀	> 2.06	Rat	Method not given	

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
pentasodium triphosphate	Not irritant	Rabbit	OECD 404 (EU B.4)	
sodium carbonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
sodium alkylbenzenesulphonate	Irritant	Rabbit	OECD 404 (EU B.4)	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Irritant	Rabbit	OECD 404 (EU B.4)	
sodium silicate	Irritant		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
pentasodium triphosphate	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
sodium carbonate	Irritant	Rabbit	OECD 405 (EU B.5)	
sodium alkylbenzenesulphonate	Severe damage	Rabbit	OECD 405 (EU B.5)	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Severe damage	Rabbit	OECD 405 (EU B.5)	
sodium silicate	Irritant		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
pentasodium triphosphate	No data available			
sodium carbonate	No data available			
sodium alkylbenzenesulphonate	No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available			
sodium silicate	Irritating to respiratory tract		Method not given	

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
pentasodium triphosphate	Not sensitising	Mouse	OECD 429 (EU B.42)	
sodium carbonate	Not sensitising		Method not given	
sodium alkylbenzenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
sodium silicate	Not sensitising		Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
pentasodium triphosphate	No data available			
sodium carbonate	No data available			

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sodium alkylbenzenesulphonate	No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available			
sodium silicate	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)
pentasodium triphosphate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 475 (EU B.11)
sodium carbonate	No data available		No data available	
sodium alkylbenzenesulphonate	No data available		No data available	
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	Method not given
sodium silicate	No evidence for mutagenicity, negative test results		No data available	

Carcinogenicity

Ingredient(s)	Effect
pentasodium triphosphate	No evidence for carcinogenicity, negative test results
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
sodium alkylbenzenesulphonate	No data available
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No evidence for carcinogenicity, negative test results
sodium silicate	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
pentasodium triphosphate	NOAEL	Developmental toxicity	141	Rat	Not known		No evidence for reproductive toxicity
sodium carbonate			No data available				
sodium alkylbenzenesulphonate			No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts			No data available				No evidence for teratogenic effects
sodium silicate			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
pentasodium triphosphate		No data available				
sodium carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
sodium silicate	NOAEL	> 159	Rat	Method not given		

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
pentasodium triphosphate		No data available				
sodium carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
sodium silicate		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
pentasodium triphosphate		No data				

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		available				
sodium carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
sodium silicate		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
pentasodium triphosphate	Oral	NOAEL	225	Rat	Equivalent of OECD 412 (EU B.8)	24 month(s)		
sodium carbonate			No data available					
sodium alkylbenzenesulphonate			No data available					
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Oral	NOAEL	259	Rat	Method not given	24 month(s)		
sodium silicate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
pentasodium triphosphate	Not applicable
sodium carbonate	Not applicable
sodium alkylbenzenesulphonate	No data available
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available
sodium silicate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
pentasodium triphosphate	Not applicable
sodium carbonate	Not applicable
sodium alkylbenzenesulphonate	No data available
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available
sodium silicate	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)
pentasodium triphosphate	LC ₅₀	1850	<i>Brachydanio rerio</i>	Method not given	24
sodium carbonate	LC ₅₀	300	<i>Lepomis macrochirus</i>	Method not given	96
sodium alkylbenzenesulphonate	LC ₅₀	1.67	<i>Lepomis macrochirus</i>	EPA-OPPTS 850.1075	96
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LC ₅₀	4.2	<i>Brachydanio rerio</i>	OECD 203 (EU C.1)	96
sodium silicate	LC ₅₀	260 - 310	<i>Oncorhynchus mykiss</i>	Method not given	96

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Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
pentasodium triphosphate	EC ₅₀	> 100	<i>Daphnia magna Straus</i>	40 CFR 797.1930	48
sodium carbonate	EC ₅₀	200-227	<i>Ceriodaphnia dubia</i>	Method not given	96
sodium alkylbenzenesulphonate	EC ₅₀	1.62	<i>Daphnia magna Straus</i>		48
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	EC ₅₀	4.53	<i>Ceriodaphnia sp.</i>	OECD 202 (EU C.2)	48
sodium silicate	EC ₅₀	1700	<i>Daphnia magna Straus</i>	OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
pentasodium triphosphate	EC ₅₀	160	<i>Desmodesmus subspicatus</i>	ISO/TC147/SC5/WG5 N84	96
sodium carbonate	EC ₅₀	> 800	<i>Selenastrum capricornutum</i>		72
sodium alkylbenzenesulphonate	EC ₅₀	29	<i>Selenastrum capricornutum</i>		96
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	EC ₅₀	5.2		OECD 201 (EU C.3)	72
sodium silicate	EC ₅₀	207	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
pentasodium triphosphate		No data available			
sodium carbonate		No data available			
sodium alkylbenzenesulphonate		No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available			
sodium silicate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
pentasodium triphosphate		No data available			
sodium carbonate		No data available			
sodium alkylbenzenesulphonate		No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	EC ₅₀	230		OECD 209	
sodium silicate		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
pentasodium triphosphate	LOEC	5	<i>Not specified</i>	OECD 212	96 hour(s)	
sodium carbonate		No data available				
sodium alkylbenzenesulphonate	NOEC	> 2.5-1		Method not given		
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
sodium silicate	NOEC	348	<i>Brachydanio rerio</i>	Method not given	96 hour(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
pentasodium triphosphate		No data available				
sodium carbonate		No data available				

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sodium alkylbenzenesulphonate		No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts		No data available				
sodium silicate		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 carbonate		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 carbonate		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				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		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				

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				

12.2 Persistence and degradability**Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium carbonate	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium carbonate	No data available		Rapidly hydrolysible	

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
sodium carbonate		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
pentasodium triphosphate					Not applicable (inorganic substance)
sodium carbonate					Not applicable (inorganic substance)
sodium alkylbenzenesulphonate	Activated sludge, aerobe	CO ₂ production	85% in 29 day(s)	OECD 301B	Readily biodegradable

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sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Activated sludge, aerobe	CO ₂ production	> 80 % in 28 day(s)	OECD 301B	Readily biodegradable
sodium silicate					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
pentasodium triphosphate	No data available			
sodium carbonate	No data available		No bioaccumulation expected	
sodium alkylbenzenesulphonate	No data available			
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	-1.3	(EC) 440/2008, A.8	No bioaccumulation expected	
sodium silicate	No data available		Low potential for bioaccumulation	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
pentasodium triphosphate	No data available			No bioaccumulation expected	
sodium carbonate	No data available			No bioaccumulation expected	
sodium alkylbenzenesulphonate	No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available				
sodium silicate	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
pentasodium triphosphate	No data available				
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
sodium alkylbenzenesulphonate	No data available				
sulphonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	No data available				Low potential for adsorption to soil
sodium silicate	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.

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

OPTIMO LAUNDRY POWDER (TOP LOADER)

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	6.3A - Irritating to the skin 8.3A - Corrosive to ocular tissue

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