

Safety Data Sheet

SUN DISHWASHER POWDER

Revision: 2024-02-18

Version: 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SUN DISHWASHER POWDER 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 Australia Pty. Limited 29 Chifley St, Smithfield, NSW, 2164, Australia Telephone: 1800 647 779 (toll free) Fax: (02) 9725 5767 Email: aucustserv@diversey.com Website: www.diversey.com/

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible) Call 1800 033 111 (24hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Serious eye damage, Category 1

2.2 Label elements



Signal word: Danger

Hazard statements:

H318 - Causes serious eye damage.

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.

P280 - Wear eye or face protection.

Response statement(s):

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.

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	30-60
sodium percarbonate	15630-89-4	239-707-6	3-10
sodium silicate	1344-09-8	215-687-4	3-10
alkyl alcohol alkoxylate	120313-48-6	[4]	1-3

[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: Skin contact:	Remove person to fresh air and keep comfortable for breathing. 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 effe	ects, both acute and delayed

Inhalation:No known effects or symptoms in normal use.Skin contact:No known effects or symptoms in normal use.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 13 11 26 (Australia Wide).

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

eye/face protection.

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

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:

Follow general hygiene considerations recognised as common good workplace practices. 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 thoroughly after handling. 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 <u>undiluted</u> 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:	No special requirements under normal use conditions.
Body protection:	No special requirements under normal use conditions.
Respiratory protection:	No special requirements under normal use conditions.
Environmental exposure controls:	No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Method / remark
Physical State: Solid Appearance: Powder Colour: White Odour: Product specific Odour threshold: Not applicable pH Not applicable (neat) Dilution pH: ≈ 11 (50%) Melting point/freezing point (°C): Not determined Initial boiling point and boiling range (°C): Not determined	Not relevant to classification of this product 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)	Not relevant to classification of this product
Evaporation rate: Not determined Flammability (solid, gas): Not determined Lower and upper explosion limit/flammability limit (%): Not determined	Not relevant to classification of this product
Vapour pressure: Not determined Relative vapour density No data available Relative density: ≈ 1.04 (20 °C) Solubility in / Miscibility with Water: Soluble Partition coefficient: n-octanol/water No information available.	Not applicable to solids OECD 109 (EU A.3)
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
9.2 Other information Surface tension (N/m): Not determined	
Corrosion to metals: Not determined	Not applicable to solids or gases Weight of evidence
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.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects Mixture

data:.

Relevant calculated ATE(s): ATE

- Oral (mg/kg): >2000

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

Acute toxicity

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

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium carbonate	LD 50	> 2000	Rabbit	Method not given	
sodium percarbonate	LD 50	> 2000	Rabbit	OECD 402 (EU B.3)	
sodium silicate	LD 50	> 5000	Rat	Method not given	
alkyl alcohol alkoxylate		No data available		Weight of evidence	

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 percarbonate		No data available			
sodium silicate	LC 50	> 2.06 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	Rabbit	OECD 404 (EU B.4)	
sodium percarbonate	Not irritant	Rabbit	Method not given	
sodium silicate	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	OECD 405 (EU B.5)	
sodium percarbonate	Severe damage	Rabbit	EPA OPP 81-4	
sodium silicate	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			
sodium percarbonate	Irritating to respiratory tract	Mouse	Method not given	
sodium silicate	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	
sodium percarbonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
sodium silicate	Not sensitising		Method not given	
alkyl alcohol alkoxylate	No data available			

Sensitisation by inhalation

Result	Species	Method	Exposure time
No data available			
	No data available No data available No data available	No data available No data available No data available	No data available No data available No data available No data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium carbonate	No data available		No data available	
sodium percarbonate	No data available		No data available	
sodium silicate	No evidence for mutagenicity, negative test results		No data available	
alkyl alcohol alkoxylate	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
sodium percarbonate	No data available
sodium silicate	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				
sodium percarbonate			No data available				
sodium silicate			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)	Specific effects and organs affected
sodium carbonate		No data available				
sodium percarbonate		No data available				
sodium silicate	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				
sodium percarbonate		No data available				
sodium silicate		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				
sodium percarbonate		No data available				
sodium silicate		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					
sodium percarbonate			No data available					
sodium silicate			No data available					
alkyl alcohol alkoxylate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium percarbonate	No data available
sodium silicate	No data available
alkyl alcohol alkoxylate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium percarbonate	No data available
sodium silicate	Not applicable
alkyl alcohol alkoxylate	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

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

Aquatic short-term toxicity

Aquatic short-term toxicity - fish					
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbona	te LC 50	300	Lepomis macrochirus	Method not given	96

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sodium percarbonate	LC 50	70.7	Pimephales promelas	Method not given	96
sodium silicate	LC 50	1108	Brachydanio rerio	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	200-227	Ceriodaphnia dubia	Method not given	96
sodium percarbonate	EC 50	4.9	Daphnia pulex	Method not given	48
sodium silicate	EC 50	1700	Daphnia magna Straus	Method not given	48
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			
sodium percarbonate		No data available			
sodium silicate	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			
sodium percarbonate		No data available			
sodium silicate		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			
sodium percarbonate	EC 50	466	Activated sludge	OECD 209	0.5 hour(s)
sodium silicate		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				
sodium percarbonate	NOEC	7.4	Pimephales promelas	Method not given	96 hour(s)	

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sodium silicate	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				
sodium percarbonate	NOEC	2	Daphnia pulex	Method not given	48 hour(s)	
sodium silicate		No data available				
alkyl alcohol alkoxylate	NOEC	>0.1- <1	Daphnia magna	Method not given	21 day(s)	

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

Terrestrial toxicity

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability Abiotic degradation Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	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)

sodium percarbonate				Not applicable (inorganic substance)
sodium silicate				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	
sodium percarbonate	No data available			
sodium silicate	No data available		Low potential for bioaccumulation	
alkyl alcohol alkoxylate	-		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
sodium percarbonate	No data available				
sodium silicate	No data available				
alkyl alcohol alkoxylate	-			No bioaccumulation expected	

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sodium carbonate	No data available				Potential for mobility in soil soluble in water
sodium percarbonate	No data available				High potential for mobility in soil
sodium silicate	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:

Empty packaging Recommendation: 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.

Dispose of observing national or local regulations.

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

The product has been classified, labelled and packaged in accordance with the requirements of ADG7.6 Code 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

National regulations	Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by Safework Australia.
Poison schedule	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Classification	Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by Safework Australia.
Inventory listing(s)	Australian Inventory of Industrial Chemicals: All components are listed on the inventory, or are exempt.
SECTION 16: Other in	formation

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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Additional information:

Respirators: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

Work practices - solvents: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

Personal protective equipment guidelines: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Health effects from exposure: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Safety Data Sheet which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations and acronyms:

- 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 Concentration, 50% / Median Lethal Concentration
- LD50 Lethal Dose, 50% / Median Lethal dose
- NOAEL No observed adverse effect level
- NOEL No observed effect level
- OECD Organization 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