

Safety Data Sheet

MACHINE DISHWASH POWDER

ISSUE DATE: 03/09/2024


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1. Identification

GHS Product identifier	Machine Dishwash Powder
Company Name	Blue Lion Supplies Pty. Ltd.
Address	Fact. 3, 29 Barry Street, BAYSWATER, VIC 3153
Telephone	(03) 9738 3900
Contact	Leigh Gillman
Recommended use of the chemical and restrictions on use	For commercial and domestic use in machine dishwashing applications. Machine Dishwash Powder is formulated to remove stubborn stains and leaves a clear sparkling streak free finish to glassware and cutlery. For commercial applications: Use 500 g dissolved in the holding tank will do 6-8 loads. For domestic applications: Use 100 g (1 heaped teaspoon) for all domestic front loading machines.
Other Names	None
Other Information	Emergency contact: Mobile: 0447 719 987

2. Hazard Identification

**Classified as Hazardous according to the criteria of WorkSafe Australia.
Classified a Dangerous Good according to the Australian Dangerous Goods (ADG) Code version 7.**

GHS classification of the substance/mixture	Skin Corrosion Category 1B Specific organ exposure toxicity (single exposure) Category 3
Signal Word (s)	DANGER WARNING
Hazard Statement(s)	H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation Xi Irritant
Risk phrases	R34 Causes burns. R37 Irritating to respiratory system.
Pictogram (s)	GHS05 GHS07 
Precautionary statement - Prevention	P260 - Do not breathe dust P264 - Wash exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P280 - Wear protective gloves, protective clothing, eye protection, face protection
Response	P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower 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 CENTER or doctor. P330 - If swallowed, rinse mouth P363 - Wash contaminated clothing before reuse
Storage	P405 - Store locked up P501 - Dispose of contents/container to comply with local, state and federal regulations

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3. Composition/information on ingredients

<u>Hazardous ingredients</u>	<u>CAS no.</u>	<u>Proportion</u>	<u>Hazard symbol</u>	<u>Risk phrase</u>
Sodium metasilicate	6834-92-0	MED	C	R 34 R37

KEY: Proportion, (wt %) - V HIGH >60, HIGH 30 - 60, MED 10 -29, LOW 1-9, V LOW <1

Non hazardous ingredients to 100%

4. First-aid measures

Ingestion:	Rinse mouth thoroughly with water immediately. Give water to drink. DO NOT induce vomiting. If vomiting occurs, have victim lean forward to reduce risk of aspiration. If vomiting occurs give further water to achieve effective dilution. Seek immediate medical assistance.
Skin:	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Seek urgent medical assistance. Cover skin with an emollient.
Eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance. If available, a neutral saline solution may be used to flush the contaminated eye/s an additional 30 minutes.
First Aid Facilities	Maintain eyewash fountain and safety shower in work area.
Advice to Doctor	Treat symptomatically and as for alkaline material.
Other Information	For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26_ New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Hazards from Combustion	When subject to high heat may produce water vapour, and fumes containing oxides of sulphur, carbon monoxide and carbon dioxide.
Suitable extinguishing media	Use extinguishing media most appropriate for the surrounding fire. Small fire: Use dry chemical, CO2 or water spray. Large fire: Use water spray, fog or foam If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.
Specific hazards arising from the chemical with fire	Material does not burn. Fire or heat will produce irritating, poisonous and/or corrosive gases. protection. Structural firefighter's uniform is NOT effective for these materials.

6. Accidental release measures

Personal Precautions	Avoid contact with skin and eyes. Do not breathe dust or mist.
Personal Protection	Gloves. Face-shield. Dust cloud production: compressed air/oxygen apparatus. Wear protective clothing specified for normal operations (see Section 8)
Clean-up Methods- Large spills	Avoid generating dust. Carefully scoop up or shovel up product and loosely seal in properly labelled drums for disposal in an area approved by local authority by-laws. Wash area down with excess water to remove residual material.
Small spills	Sweep up contaminated product and wash area down with excess water.
Environmental Precautions	Avoid release to the environment.

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7. Handling and storage

Precautions for Safe Handling	Remove contaminated clothing immediately. Clean contaminated clothing. Use corrosion proof equipment. Avoid contact with skin and eyes. Avoid formation of dust.
Conditions for safe storage, including any	Store in a cool, dry place. Keep containers securely sealed. Product is hygroscopic.
Incompatibilities	Incompatible with strong acids, lead, tin/tin oxides, zinc and aluminium.

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL	TWA	Footnote
	<u>mg/m³</u>	<u>mg/m³</u>	
	<u>ppm</u>	<u>ppm</u>	

There are no occupational exposure standards set for this product or ingredients in this product.

Other exposure Information

The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

Appropriate engineering Controls

In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

Personal Protective Equipment

Avoid skin and eyes contact. Avoid creating dusts – irritating to respiratory system. Wear personal protective equipment outlined below when handling this product.

Respiratory Protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-face piece SCBA should be used. If respiratory protection is required; institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

Eye Protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Hand Protection

Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.

Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Recommendation: Nitrile rubber.

Footwear

Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection

Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hygiene Measures

Do not eat, drink or smoke in work areas. Wash hands thoroughly after handling this material. Maintain good housekeeping.

9. Physical and chemical properties

Appearance	White free flowing powder
Odour	Faint chlorine
Melting Point	Not determined

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Boiling Point	Not determined
Flash point	Not applicable
Vapour Pressure	Not determined
Solubility	20-30% in water
Specific Gravity	0.9 - 1.0 (bulk)
pH	12 – 12.5 (1% recommended application level)
Percent volatile	0.2
Flammability	Non flammable
Other Data	0.9% available chlorine

10. Stability and reactivity

Chemical Stability	Stable under normal use conditions.
Conditions to Avoid	No data available.
Incompatible Materials	Strong acids, Lead, Tin/tin oxides, Zinc, Aluminium
Hazardous Decomposition products	When subject to high heat may produce water vapour, and fumes containing oxides of sulphur, carbon monoxide and carbon dioxide.
Possibility of hazardous reactions	Not expected to occur.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

The following information is based on 100% Sodium metasilicate.

Acute toxicity

LD50 Oral 1,152 - 1,349 mg/kg (Rat - male and female)
Remarks Gastrointestinal: Ulceration or bleeding from stomach.

Skin corrosion/irritation

Skin - rabbit
Result: Corrosive - 4 h (OECD Test Guideline 404)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

In vivo assay - mouse
Result: Does not cause skin sensitisation (OECD Test Guideline 429)

Germ cell mutagenicity

Ames test - *S. typhimurium*
Result: negative
Mouse - male
Result: negative

Carcinogenicity

IARC No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Reproductive toxicity - rat - Oral
Effects on Newborn: Stillbirth. Effects on Newborn: Live birth index (# fetuses per litter; measured after birth).
Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).
Specific target organ toxicity - single exposure

Inhalation

May cause respiratory irritation.

Specific target organ toxicity –

repeated exposure No data available

Aspiration hazard

No data available

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Additional Information

Repeated dose toxicity - rat - male and female - No observed adverse effect level - 227 - 237 mg/kg

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.

ACUTE EFFECTS

Symptoms that may arise if the product is mishandled are:

Swallowed

Swallowing can result in irritating mouth, oesophagus and stomach. Headaches and nausea possible.

Eye

Powder and solutions are irritants to eyes and mucous membranes. Overexposure may lead to eye tissue damage.

Skin

In the concentrated form, prolonged skin contact without rinsing may irritate skin upon contact. Skin inflammation is characterized by a burning sensation, itching, scaling or reddening. Dermatitis may develop depending on the individual's sensitivity.

Inhaled

Breathing excessive amounts of dust may produce nasal and upper respiratory irritation characterized by discomfort and sore throat. Effects of prolonged occupational exposure are not known.

CHRONIC EFFECTS

No information available for product.

12. Ecological information

The following information is based on 100% Sodium metasilicate.

Toxicity

Toxicity to fish semi-static test

LC50 - Danio rerio (zebra fish) - 210 mg/l - 96 h

LC50 Gambusia affinis 2320 mg/l/96h (pH 8.9-10.1)

EC50 Daphnia 247 mg/l/100h (pH 9.1)

Bacteria-30 min. ECO(Pseudomonas putida) >1000mg/l

Persistence and

Degradability

No data available.

Mobility in soil

No additional information available

Other adverse effects

No additional information available

13. Disposal considerations

Disposal Considerations

Reuse reclaimed material if possible. Carefully dissolve in water and greatly dilute, or neutralise with dilute acid and flush to drain with copious amounts of water. Otherwise, place in plastic container prior to disposing through normal commercial refuse system. Refer to State Land Waste Management Authority. Normally suitable for disposal at approved land waste site.

14. Transport information

Transport Information

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following: Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, Class 7 and are incompatible with food and food packaging in any quantity. Not to be loaded on the same vehicle with strong acids.

U.N. Number

3262

UN proper shipping name

CORROSIVE SOLID, BASIC, INORGANIC, N.O.S (Sodium metasilicate)

Transport hazard class(es)

8

Hazchem Code

Packing Group

II

15. Regulatory information

Regulatory Information

Listed in the Australian Inventory of Chemical Substances (AICS).

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Poisons Schedule 5

16. Other Information

Date of preparation or last revision of SDS 03/09/2024

References

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007.
'Labeling of Hazardous Workplace Chemicals, Code of Practice' Safe Work Australia.
Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]'.
Safe Work Australia, 'Hazardous Substances Information System, 2005'.
Safe Work Australia, 'National Code of Practice for the Labeling of Safe Work Hazardous Substances (2011)'.

*THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.
IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS.*