

SAFETY DATA SHEET

AQUASONIC Pty. Ltd.

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METHYLENE BLUE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Methylene Blue
Product use	Ornamental aquariums and aquaculture eg. Used to assist in the treatment and control of whitespot disease and superficial fungal infections
Supplier details	Aquasonic Pty Ltd (ABN 70 001 427 256) 14 Commerce Street Wauchope NSW 2446 Australia Tel: +61 2 6586 4933 Fax: +61 2 6586 4944
Emergency contact	Poisons Information Centre Tel: 1800 039 008
Product size	100ml, 250ml, 1L
Product code	PL080, PL084, PL081

2. HAZARDS IDENTIFICATION

GHS Classification	Not a hazardous substance or mixture
Hazard Classification	Acute toxicity, Oral (Category 4)

Symbol (GHS)



Signal word Warning

Hazard Statement

H302 Harmful if swallowed

Precautionary Statement

P264	Wash face, hands and any exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
P330	Rinse mouth
P403	Store in a well-ventilated place
P501	Dispose of contents/ container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical composition

Methylene Blue | CAS #: 61-73-4 | WT: proprietary concentration

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Distilled Water | CAS# 7732-18-5 | WT: proprietary concentration

4. FIRST AID MEASURES

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
General Advice	If symptoms persist, call a physician.
Self-Protection of the First Aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
First Aid Facilities	Eyewash, safety shower and washroom.
Most important symptoms and effects	None reasonably foreseeable.
Notes to Physician	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Special protective equipment and precautions for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear..

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

Environmental Precautions

Should not be released into the environment.

Methods for Containment and Clean Up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

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7. HANDLING AND STORAGE

Precautions for Safe Handling Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Conditions for Safe Storage, Including any Incompatibilities
Keep containers tightly closed in a dry, cool and well-ventilated place.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits The product does not contain any hazardous materials with occupational exposure limits established.

Biological limit values This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Exposure Controls Engineering Measures Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment Eye Protection Safety glasses with side-shields (Australian/New Zealand Standard AS/NZS 1337 – Eye protectors for Industrial applications)

Hand Protection Protective gloves

Glove material Nitrile rubber, Neoprene, Natural rubber, PVC

Breakthrough time See manufacturers recommendations

Glove thickness -

AUS/NZ Standard AS/NZS 2161.1

Glove comments (minimum requirement)
Inspect gloves before use. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove gloves with care avoiding skin contamination

Respiratory Protection Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use and maintenance of respiratory protective devices

Recommended Filter type Particulates filter conforming to EN 143 (or AUS/NZ equivalent)

Recommended half mask Particle filtering: EN149:2001 (or AUS/NZ equivalent) When RPE is used a face piece Fit Test should be conducted.

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Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Aqueous dark green
Odour	Almost odourless
Melting Point	190°C
Boiling Point	Not Applicable
Solubility in Water	Soluble (1g/25mL)
Specific Gravity	1.23
pH Value	3-5 (1% Aqueous Solution)
Vapour Pressure	Not Applicable
Vapour Density (Air = 1)	Not Applicable
Flash Point	Not Available
Flammability	Not Flammable
Auto-Ignition Temp	Not Available Flammable Limits
Lower	Not Available
Flammable Limits - Upper	Not Available

10. STABILITY AND REACTIVITY

Reactivity	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products, Excess heat, Avoid dust formation.
Hazardous Decomposition Products	None under normal use conditions

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Product Information

(a) acute toxicity;

Oral	Category 4
Dermal	No data available
Inhalation	No data available
Toxicology Information	Acute toxicity: LD50 ORAL (rat): 1180mg/kg

Inhalation Inhalation of dusts may irritate the respiratory system.

Ingestion Harmful if swallowed. Ingestion of this product may cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea. Ingestion may cause methemoglobinemia (deficient oxygenation of the blood). Other symptoms of methemoglobinemia such as cyanosis (blueish discolouration of the skin), lethargy, dizziness, fatigue, CNS depression and shock may be observed.

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Skin	Skin contact may cause mechanical irritation resulting in redness and itching.
Eye	May cause mechanical irritation. May result in mild abrasion.
Chronic Effects	Prolonged or repeated exposures through skin contact, inhalation or swallowing of this material will result in harmful effects including central nervous system effects.
Reproductive Toxicity	Experimental animal studies showed that first trimester exposure may cause adverse reproductive effects.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data is available for this material.
Persistence/Degradability	Not Available
Mobility	Not available
Environment Protection	Do not allow product to enter drains, waterways or sewers.

13. DISPOSAL CONSIDERATIONS

<i>Disposal Considerations</i>	Dispose of waste according to federal, EPA and state regulations.
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14. TRANSPORT INFORMATION

Transport Information:	Australia: Not classified as dangerous goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
New Zealand:	Not classified as Dangerous Goods according to New Zealand Standard 5433:2007 – Transport of Dangerous Goods on Land

15. REGULATORY INFORMATION

Regulatory Information:	Australia: Classified as hazardous according to criteria of Australian National Occupational Health & Safety Commission (NOHSC). Classified as a Scheduled Poison according to the standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)
Poisons Schedule: National and/or International	S4 New Zealand: Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Regulatory Information: Hazard Category:	Methylene Blue Approval Number: HSR003661 Harmful

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16. OTHER INFORMATION

Key/Legend

<	Less than	L	Litre of liquid
>	Greater than	LC50	Lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% of a group of test animals
ADG	Australian Code for the Transport of Dangerous Goods by Road & Rail	LD50	Lethal dose. LD50 is the amount of material, given all at once, which causes the death of 50% of a group of test animals
AISC	Australian Inventory of Chemical Substances	L.E.L	Lower explosion limit
g	Gram	mg/L	Milligram per litre of liquid
g/L	Grams per litre	TWA	Time weighted average
H ₂ O	Chemical formula for water	U.E.L.	Upper explosion Limit
Kg	Kilogram		

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate at the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for that stated, without seeking prior advice from Aquasonic Pty. Ltd.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. Aquasonic Pty. Ltd. shall not be deemed responsible for any damage or injury resulting from use, other than the stated use of the product, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the product. Purchasers of the product for supply to a third party for use, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact Aquasonic Pty. Ltd. to ensure that this document is the most current available. Alteration of this document is strictly prohibited.