**SAFETY DATA SHEET**

**According to Safe Work Australia**

Printing date 26/06/2017 Revision: 26/06/2017

**1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY**

**Product Name: PSM BIO CONTROL**

**Other Means of Identification:** Mixture

**Recommended Use of the Chemical and Restriction on Use:** Biocide and disinfectant

**Details of Manufacturer or Importer:**

PSM Australia

PO Box 292

Tooradin VIC 3980

**Phone Number:** 0419 345 441

**Emergency telephone number:** 0419 345 441

**2 . HAZARDS IDENTIFICATION**

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



corrosion

Eye Dam. 1 H318 Causes serious eye damage.



Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

**Signal Word** Danger

**Hazard Statements**

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

|  |  |
| --- | --- |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P273 | Avoid release to the environment. |
| P264 | Wash hands thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |

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/doctor. |
| P321 | Specific treatment (see on this label). |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |

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| P501 |  | (Contd. of page 1) |  |
| Dispose of contents/container in accordance with local/regional/national regulations. |  |

**3 . COMPOSITION AND INFORMATION ON INGREDIENTS**

**Chemical Characterization: Mixtures**

**Description:** Mixture of substances listed below with nonhazardous additions.

|  |  |
| --- | --- |
| **Hazardous Components:** |  |
| 10222-01-2 | 2,2-dibromo-2-cyanoacetamide | <3% |
|  | Acute Tox. (Inhalation) 3, H331; Eye Dam. 1, H318; Aquatic Acute 1, H400; |  |
|  | Acute Tox. (Oral) 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317 |  |
|  |  |  |
| 55965-84-9 | reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2- | <0.6% |
|  | methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) |  |
|  | Acute Tox. (Oral) 3, H301; Acute Tox. (Dermal) 3, H311; Acute Tox. (Inhalation) 3, |  |
|  | H331; | Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; |  |
|  | Skin Sens. 1, H317 |  |
|  |  |  |  |



**4 . FIRST AID MEASURES**

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

**Ingestion:**

If swallowed, do not induce vomiting.Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

**Symptoms Caused by Exposure:**

Inhalation: Inhaled aerosols may cause irritation to the upper respiratory system. May cause cough, wheezing, shortness of breath. Over-exposure may lead to chemical pneumonitis (irritation and inflammation of lung tissues) and pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed.

Skin Contact: Causes skin irritation, redness, itching and pain. Eye Contact: Causes serious eye damage, redness and pain.

Ingestion: May be harmful if swallowed. May cause irritation to mouth, throat and gastrointestinal system, nausea, vomiting and diarrhoea.

**5 . FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Water fog or fine water spray.

**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon and nitrogen, hydrogen chloride and hydrogen bromide.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

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**6 . ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved respiratory protection, chemical resistant gloves, safety glasses, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. May be slippery when spilled. Wash site of spillage thoroughly with water and detergent.

**7 . HANDLING AND STORAGE**

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Contaminated work clothing must not be allowed out of the workplace. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep in original container tightly closed when not in use. Protect from direct sunlight. Keep away from strong oxidising agents, alkalis and acids. Protect from physical damage.

**8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Exposure Standards:**

ES-TWA: Isothiazolinone compounds - 0.1 mg/m³ [Manufacturer’s recommendation] ES-STEL: Isothiazolinone compounds - 0.3 mg/m³ [Manufacturer’s recommendation]

Sensitiser - Isothiazolinone compounds are known sensitisers and may cause a specific immune response in some individuals.

**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

**Respiratory Protection:**

Use approved P1 vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**

PVC, PVA, nitrile, neoprene, rubber or vinyl gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

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**Eye and Face Protection:**

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

**9 . PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:**

**Form:** Liquid

**Colour:** Clear, colourless to pale yellow

**Odour:** Mild medicinal odour

**Odour Threshold:** Not determined.

**pH-Value:** 2 (acidic)

**Melting point/Melting range:** 0 °C (water)

**Initial Boiling Point/Boiling Range:** 100 °C (water)

**Flash Point:** Not applicable

**Flammability:** Not applicable.

**Auto-ignition Temperature:** Not applicable

**Decomposition Temperature:** Not determined.

**Explosion Limits:**

**Lower:** Not determined.

**Upper:** Not determined.

**Vapour Pressure:** Not determined.

**Density:** Not determined.

**Relative Density at 20 °C:** 1.0-1.1

**Vapour Density:** Not determined.

**Evaporation Rate:** Similar to water

**Solubility in Water:** Miscible in all proportions

**% Volatiles by Volume:** >90 % (water)

**10 . STABILITY AND REACTIVITY**

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur. **Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Direct sunlight.

**Incompatible Materials:** Oxidising agents, acids and alkalis.

**Hazardous Decomposition Products:**

Oxides of carbon and nitrogen, hydrogen chloride and hydrogen bromide.

**11 . TOXICOLOGICAL INFORMATION**

**Toxicity:**

**LD₅₀/LC₅₀ Values Relevant for Classification: 10222-01-2 2,2-dibromo-2-cyanoacetamide**

LD50 235 mg/kg (rat)

Irritation of skin LD50 >2000 mg/kg (rabbit)

**Acute Health Effects**

**Inhalation:**

Inhaled aerosols may cause irritation to the upper respiratory system. May cause cough, wheezing, shortness of breath. Over-exposure may lead to chemical pneumonitis (irritation and inflammation of lung tissues) and pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed.

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**Skin:** Causes skin irritation, redness, itching and pain. **Eye:** Causes serious eye damage, redness and pain.

**Ingestion:**

May be harmful if swallowed. May cause irritation to mouth, throat and gastrointestinal system, nausea, vomiting and diarrhoea.

**Skin Corrosion / Irritation:** Causes skin irritation.

**Serious Eye Damage / Irritation:** Causes serious eye damage.

**Respiratory or Skin Sensitisation:**

Sensitisation possible through skin contact. May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met. **Carcinogenicity:** This product does NOT contain any IARC listed chemicals.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.

**Chronic Health Effects:**

Repeated or prolonged skin contact may cause irritant contact dermatitis. Both active ingredient are are classified as sensitising by skin contact, with potential for allergic reactions on any subsequent exposure.

**Existing Conditions Aggravated by Exposure:**

Pre-existing skin disorders and prior sensitisation to the active ingredients.

**12 . ECOLOGICAL INFORMATION**

**Ecotoxicity:** No information available

**Aquatic toxicity:**

This product contains mixed biocides, effective against bacteria, mould, slime and algae. Harmful to crustacean, algae and fish at the delivered product concentration, but no longer rated harmful to aquatic organisms when the product is further diluted at least 1 part product with 10 parts water.

**Persistence and Degradability:** No information available

**Bioaccumulative Potential:** No information available

**Mobility in Soil:** No information available

**Other adverse effects:** No information available

**13 . DISPOSAL CONSIDERATIONS**

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

**14 . TRANSPORT INFORMATION**

**UN Number** Not regulated

**Proper Shipping Name** Not regulated

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**Product Name: PSM BIO CONTROL**

**Dangerous Goods Class** Not regulated

**Packing Group:** Not regulated

**15 . REGULATORY INFORMATION**

**Australian Inventory of Chemical Substances:**

10222-01-2 2,2-dibromo-2-cyanoacetamide 7732-18-5 Water

55965-84-9 reaction mass of: 5- chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**

Not Scheduled.

**16 . OTHER INFORMATION**

**Date of Preparation or Last Revision:** 26/06/2017

**Prepared by:** MSDS.COM.AU Pty Ltd www.msds.com.au

**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society) LC₅₀: Lethal concentration, 50 percent

LD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants) Acute Tox. (Oral) 4: Acute toxicity, Hazard Category 4

Acute Tox. (Inhalation) 3: Acute toxicity, Hazard Category 3 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 Skin Sens. 1: Skin sensitisation, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1 Aquatic Chronic 3: Hazardous to the aquatic environment, long-term (Chronic). Category 3

**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011”

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