| BUSHBY greener science | SAFETY DATA SHEET |
|---|---|
| | **Product Name:** D MOULD – (MOULD INHIBITOR / CLEANER) |
| | **Date of Issue: FEBRUARY 2019 Page 1 of Total 6** |

## SECTION 1 – STATEMENT OF CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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|---|---|---|---|
| **Trade Name:** | **D MOULD (MOULD INHIBITOR / CLEANER)** | | |
| **SUPPLIER:** | BUSHBY CLEANING PRODUCTS | | |
| **ADDRESS:** | 21 Activity Crescent, Molendinar Qld 4214 | | |
| **TELEPHONE:** | **07 5539 2244** | **FAX:** | **07 5539 2477** |
| **AH EMERGENCY TELEPHONE:** | 13 1126 in Australia | **Product Code:** | |
| **Substance:** | Water based | **Product Use:** | Black Mould /Algae remover |
| **Creation Date:** | MARCH 2017 | **Revision Date:** | MARCH 2022 |

## SECTION 2 – HAZARDS IDENTIFICATION

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| **Classification of the substance or mixture** | |
| **Poisons Schedule** | S5 (CHLORINATING COMPOUNDS) |
| **Dangerous Goods** | Not classified as Dangerous Goods |
| **GHS Classification** | Eye Irritation Category 2A<br>Skin Irritation Category 2 |
| **Label elements** | |
| **GHS label pictograms** |  <br>GHS 07 |
| **Signal word** | **WARNING** |
| **Hazard statement(s)** | |
| **H290** | May be corrosive to metals |
| **R36=H319/R38=H315** | Irritating to eyes and skin |
| **AUH031** | Contact with acids liberates toxic gas. |
| **Precautionary statement(s): General** | |
| **P102** | Keep out of reach of children. |
| **P103** | Read label before use. |
| **Precautionary statement(s): Prevention** | |
| **P264** | Wash skin thoroughly after handling. |
| **P280** | Wear eye protection/face protection and protective gloves. |
| **Precautionary statement(s): Response** | |
| **P305+P351+P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| **P337 + P313** | If eye irritation persists: Get medical advice/attention. |
| **P302 + P352** | IF ON SKIN: Wash with plenty of soap and water. |
| **P332 + P313** | If skin irritation occurs: Get medical advice/attention. |
| **P321** | Specific treatment (see First Aid Measures on Safety Data Sheet). |
| **P362** | Take off contaminated clothing and wash before reuse. |
| **Precautionary statement(s): Storage** | |
| | None allocated |
| **Precautionary statement(s): Disposal** | |
| | None allocated |
| **Note** | |
| **IMPORTANT** | This SDS and the Hazard Classifications contained therein, only apply to the product in its |

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| | concentrated form, as supplied. When diluted to 1:2 or greater they no longer apply. However, good hygiene and housekeeping practices should be adhered to. |

## SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

| Ingredients: | CAS Number: | Proportion: |
|---|---|---|
| sodium hypochlorite | 7681-52-9 | < 50% w/w |
| Sodium hydroxide | 1310-73-2 | < 0.5% w/w |
| Ingredients determined to be non-hazardous | various | >60% w/w |

NOTE: Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication "List of Designated Hazardous Substances" or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication "Approved Criteria for Classifying Hazardous Substances", or have been found NOT to meet the criteria of a dangerous substance as defined in the GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) , 4th edition United Nations 2011. Listed ingredients may be below the cut-off concentrations for classification as hazardous, but are listed for information purposes and for additive effects.

## SECTION 4 – FIRST AID MEASURES

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| **Inhalation** | Remove victim to fresh air away from exposure. Obtain medical attention if symptoms occur. |
| **Skin contact** | Immediately wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. Seek medical advice (e.g. doctor) if irritation, burning or redness persists. |
| **Eye contact** | If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If symptoms persist, seek medical attention. |
| **Ingestion** | Do NOT induce vomiting. Do NOT attempt to give anything by mouth to an unconscious person. Rinse mouth thoroughly with water immediately. Give water to drink. If vomiting occurs, give further water to achieve effective dilution. Seek medical advice (e.g. doctor). |
| **Advice to Doctor** | Treat symptomatically. Consider oral administration of sodium thiosulfate solutions if sodium hypochlorite is ingested. Do not administer neutralizing substances (e.g., acid antidotes) since the resultant exothermic reaction could further damage tissue. Sodium thiosulphate immediately reduces hypochlorite to non-toxic products but may product hydrogen sulphide in contact with acids. Endotracheal intubation could not be needed if oedema compromises the airway. For individuals with significant inhalation exposure monitor arterial blood gases and chest x-ray. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure. |
| **Scheduled Poisons** | Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons. (Phone Australia 131126 or New Zealand 0800 764 766). |
| **First Aid Facilities** | Eye wash station. Normal washroom facilities. |

## SECTION 5 – FIRE FIGHTING MEASURES

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| **Fire and Explosion Hazards** | Non flammable liquid. However, on evaporation of the aqueous component, the residual material may burn. |
| **Extinguishing Media** | Use an extinguishing media suitable for surrounding fires. Use carbon dioxide (CO2) fire extinguisher, water fog or alcohol resistant foam or fine water spray. |
| **Fire Fighting** | Keep containers exposed to extreme heat cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion or decomposition. |
| **Flash Point** | None |

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

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| **Emergency Procedures** | Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water-courses. Wear appropriate protective equipment as in section 8 below to prevent skin and eye contamination. Spilt material may result in a slip hazard and should be absorbed into dry, inert material (e.g. sand, earth or vermiculite), which then can be put into appropriately labelled drums for disposal by an approved agent according to local conditions. Residual deposits will remain slippery. Wash area down with excess water. If required, neutralize with sodium metabisulphite or sodium thiosulphate. If contamination of sewers or waterways has occurred advise the local emergency services. In the event of a large spillage notify the local environment protection authority or emergency services. |

## SECTION 7 – HANDLING AND STORAGE

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| **Handling** | Avoid skin or eye contact with concentrate. Wear protective clothing when risk of exposure occurs. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered. Launder contaminated clothing before re-use. |
| **Storage** | Store in a cool, dry, well-ventilated area, out of direct sunlight. Protect from freezing. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations. |

## SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

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| **Exposure Limits** | National Occupational Exposure Limits, as published by National Occupational Health & Safety Commission:<br>**Time-weighted Average (TWA):**<br>None established for product.<br>• Sodium hypochlorite: 3 mg/m3 (1 ppm) Peak limitation<br>• Sodium hydroxide: 2 mg/m3 Peak limitation<br>**Short Term Exposure Limit (STEL):**<br>None established for product. |
| **Ventilation** | Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. If inhalation risk exists: Use with local exhaust ventilation or while wearing air supplied mask. Keep containers closed when not in use. |
| **Personal Protective Equipment** | Use good occupational work practice. The use of protective clothing and equipment depends upon the degree and nature of exposure. The following protective equipment should be available; |
| **Eye Protection**  | Safety glasses with full face shield should be used for handling concentrate in quantity, cleaning up spills, decanting, etc. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications. |
| **Hand Protection**  | Wear gloves of impervious material such as butyl rubber, natural latex, neoprene, PVC and nitrile – to handle in quantity, clean up spills, decanting, etc. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance. |
| **Body Protection**  | Generally, not required for typical applications as per label directions.<br>Suitable protective workwear, e.g. rubber or plastic apron, sleeves, boots and cotton overalls buttoned at neck and wrist are recommended. Chemical resistant apron is recommended where large quantities are handled. |

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| **Respirator** | Generally, not required for typical applications with diluted solutions as per label directions. If engineering controls are not effective in controlling airborne exposure, then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances. |

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

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| **Physical State** | Non-viscous liquid | **Colour** | Straw |
| **Odour** | chlorine odour | **Specific Gravity** | 1.05 – 1.08 @ 25 °C |
| **Boiling Point** | Approximately 100 °C | **Freezing Point** | Approximately 0 °C |
| **Vapour Pressure** | Not available | **Vapour Density** | Not available |
| **Flash Point** | does not support combustion | **Flammable Limits** | Not available |
| **Water Solubility** | Completely | **pH** | 12.5-13.5 |
| **Volatile Organic Compounds (VOC)** | Ca 0 % v/v | **Per Cent Volatile** | Ca 95 % v/v |
| **Viscosity** | Not available | **Odour Threshold** | Not available |

## SECTION 10 – STABILITY AND REACTIVITY

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| **Reactivity** | Stable at normal temperatures and pressure. |
| **Conditions to Avoid** | Exposure to light, air or heat, acid conditions, the presence of combustible materials, metals and other impurities and incompatible materials. |
| **Incompatibilities** | Reaction with primary amines (e.g. ethylamine) and aromatic amines (e.g. aniline) forms explosively unstable N-mono- or di- chloramines. Reaction with ammonium salts (e.g. ammonium sulfate and ammonium nitrate), ammonia, urea or phenylacetonitrile forms explosive nitrogen trichloride, if acid is present. Contact with acids, especially hydrochloric acid, releases toxic and corrosive chlorine gas. Reactions with reducing agents (e.g. hydrides, such as lithium aluminum hydride) are violent. Reactions with ethyleneimine (aziridine) form the explosive N-chloroethyleneimine. Reactions with methanol can form explosive methyl hypochlorite, especially in the presences of acids or other estification catalysts. Reactions with formic acid become explosive at 55oC. Drop wise addition of the furfuraldehyde to a 10% excess sodium hypochlorite solution at 20-25oC can lead to violent explosion. Reaction with ethanediol (ethylene glycol) is explosively violent after an induction period of about 4 to 8 minutes. Reaction with sodium ethylenediaminetetracetate (EDTA) solution and sodium hydroxide solution with mixing leads to vigorous foaming decomposition will not occur. |
| **Hazardous Decomposition** | Thermal decomposition may result in the release of toxic and/or irritating fumes. |

## SECTION 11 – TOXICOLOGICAL INFORMATION

**POTENTIAL HEALTH EFFECTS**

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

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| **Inhalation** | Over exposure may result in mucous membrane irritation of the respiratory tract, coughing. |
| **Skin contact** | Prolonged contact with concentrate may be irritating to skin. |
| **Eye contact** | Concentrated product may cause eye irritation. Eye contact with concentrate will cause stinging, blurring, tearing. |
| **Ingestion** | Ingestion of this product may irritate the gastric tract causing nausea and vomiting. |

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| **Chronic exposure** | Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis. |
| **Toxicology Information** | Not toxic, based on ingredients. Oral LD50 (calculated) : >20,000 mg/kg |
| **Carcinogen Status** | |
| **NOHSC** | No significant ingredient is classified as carcinogenic by NOHSC. |
| **NTP** | No significant ingredient is classified as carcinogenic by NTP. |
| **IARC** | No significant ingredient is classified as carcinogenic by IARC. |
| **Respiratory sensitisation** | Not expected to be a respiratory sensitizer. |
| **Skin Sensitisation** | Not expected to be a skin sensitizer. |
| **Germ cell mutagenicity** | Not considered to be a mutagenic hazard. |
| **Reproductive Toxicity** | Not considered to be toxic to reproduction. |
| **STOT-single exposure** | Not expected to cause toxicity to a specific target organ. |
| **STOT-repeated exposure** | Not expected to cause toxicity to a specific target organ. |
| **Aspiration Hazard** | Not expected to be an aspiration hazard. |

## SECTION 12 – ECOLOGICAL INFORMATION

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| **Eco-toxicity Product (as sold)** | Harmful to aquatic life with long-lasting effects.<br>Acute Aquatic Toxicity - 3 /Chronic Aquatic Toxicity - 3<br>Acute Aquatic Toxicity (Calculated) LC50: 1.5 - 100 mg/L. |
| **Eco-toxicity Product (at use dilution 1:100 rinse)** | Not harmful to aquatic life. LC50 > 100mg/L.<br>Acute Aquatic Toxicity NOT HAZARDOUS.<br>Acute Aquatic Toxicity (Calculated) LC50: 150 – 10000 mg/L. |
| **Persistence and degradability** | Hypochlorites are non-persistent in the environment and there is no accumulation potential as they gradually decompose into a salt and oxygen. |
| **Bio accumulative potential** | No bioaccumulation is expected. |
| **Mobility in soil** | Due to its physico-chemical characteristics, highly mobile in the environment and will partition to the aquatic compartment. |
| **Other adverse effects** | Not available |
| **Environmental Protection** | Do not discharge this material into waterways. |

## SECTION 13 – DISPOSAL CONSIDERATIONS

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| **Spills and Disposals:** | Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. |

## SECTION 14 – TRANSPORT INFORMATION

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| **Labels Required** | |
| **ADG** | Not classified as Dangerous Goods. |
| **IMDG Marine Pollutant** | No |
| **HAZCHEM** | None allocated. |
| **Land Transport (ADG)** | |
| **UN Number** | None allocated. |
| **ADG Code** | None allocated. |
| **HAZCHEM Code** | None allocated. |
| **Special Provisions** | None allocated. |
| **Packing Group** | None allocated. |
| **Packaging Method** | None allocated. |

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| **Segregation** | None allocated. |

| **SECTION 15 – REGULATORY INFORMATION** | |
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| **GHS Classification** | Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia. |
| **SUSMP** | S5 (CHLORINATING COMPOUNDS) |
| **ADG Code** | Not DG |
| **AICS** | All ingredients present on AICS. |

| **SECTION 16 – OTHER INFORMATION** | |
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| **Issue Date** | 4th March 2017 |
| **Version Number** | V 2.0 GHS classification |
| **Abbreviations and acronyms** | **ADG Code**: Australian Code for the Transport of Dangerous Goods by Road and Rail.<br>**AICS:** Australian Inventory of Chemical Substances.<br>**CAS Number**: Chemical Abstracts Service Registry Number.<br>**GHS**: Globally Harmonized System of Classification and Labelling of Chemicals<br>**HAZCHEM:** An emergency action code of numbers and letters which gives information to emergency services.<br>**HSIS:** Hazardous Substances Information System<br>**IARC**: International Agency for Research on Cancer.<br>**NOHSC**: National Occupational Health and Safety Commission.<br>**NTP**: National Toxicology Program (USA).<br>**SDS**: Safety Data Sheet<br>**STEL**: Short Term Exposure Limit.<br>**SUSMP**: Standard for the Uniform Scheduling of Medicines and Poisons.<br>**TWA**: Time Weighted Average.<br>**UN Number**: United Nations Number. |
| **Literature references** | Preparation of Safety Data Sheets for Hazardous Chemicals – Code of Practice ( Safe Work Australia)<br>GHS Hazardous Chemical Information List (Safe Work Australia)<br>Guidance on the Classification of Hazardous Chemicals under the WHS Regulations.<br>Global Harmonized System of Classification and Labelling of Chemicals (GHS)<br>"Australian Exposure Standards". Safework Australia<br>Australian Code for The Transport Of Dangerous Goods By Road And Rail<br>Standard for the Uniform Scheduling of Medicines and Poisons<br>Material Safety Data Sheets – individual raw materials – Suppliers |
| **Disclaimer** | This MSDS summarizes at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since the supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this supplier. |

**End of SDS**