

MATERIAL SAFETY DATA SHEET

PRODUCT: BROMINE TABLETS

SOLD AS: Sammy Bromine Tablets

Date of Issue: March 15, 2006

STATEMENT OF HAZARDOUS NATURE

Classified as hazardous according to criteria of WorkSafe Australia

COMPANY DETAILS

Company: Plumbers' Supplies Co-operative Limited

Address: Unit 87A, 79-97 St Hilliers Road Auburn NSW 2144

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PRODUCT IDENTIFICATION

Product Name	Bromine
Other Names	Brominating Tablets Dihalo Tablets BCDMH Tablets
UN Number	1479 *
DG Class	5.1 *
Hazchem Code	1Y *
Poisons Schedule	S6

* For the purpose of transportation by road and rail, quantities of **less than 1 kg** have been identified as **non-dangerous goods** by the Australian WorkCover Authority. Bulk quantities are classified as per the above schedule and are dealt with in the subsection on Storage and Handling.

PHYSICAL DESCRIPTION AND PROPERTIES

Appearance:	White tablets, bromine odour.
Boiling Point:	Decomposes > 145°C
Melting Point :	Decomposes > 145°C
Vapour Pressure:	N Av
Specific Gravity:	0.96
PH:	3.4 – 3.6 (0.1% solution at 20°C)
Solubility:	1.5 g/L in water at 20°C
Reactivity:	Stable under normal conditions.

Avoid contact with water during storage or handling.
Reacts with easily oxidisable material, including many pool
Chemicals in their concentrated form.
Reacts exothermically with strong acids and alkalis.
Reacts with ammonia, urea and related nitrogen
compounds
Reacts with inorganic reducing agents.

COMPOSITION

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Proportion</u>
1-Bromo-3-chloro-5, 5- dimethylhydantion (BCDMH)	16079-88-2	96%
Inert Materials (not including water)	Not allocated	Balance

HEALTH HAZARD INFORMATION

Effects from Acute Exposure

- Ingestion:** Extremely corrosive. Ingestion may result in death.
- Eyes:** Extremely corrosive to eyes. May cause sever corneal damage and possibly blindness.
- Skin:** Corrosive to skin. May cause severe burns.
- Inhalation:** Corrosive. Inhalation of vapours and dust may cause Severe irritation to nose, mouth and throat.

Effects from Chronic Exposure

The effects of long term, low level exposures to this product have not been determined. However, safe handling of this product on a long-term basis should emphasised minimising repeated acute exposures.

FIRST AID

- Ingestion:** If conscious, drink large quantities of water immediately. Do NOT induce vomiting. Take immediately to a hospital. Do NOT attempt to induce vomiting or give anything by mouth to an unconscious person.
- Eyes:** Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek medical Attention.
- Skin:** Immediately wash contaminated area with plenty of water. Remove contaminated clothing. Wash contaminated

Clothing before re-use. If irritation occurs, contact a Doctor.

Inhalation: Move victim into fresh air and obtain medical assistance. If breathing has stopped, clear airway and give artificial Respiration, preferable mouth-to-mouth. If breathing is difficult, give oxygen.

Advice to doctor: Probable mucosal damage may contraindicate the use of Gastric lavage.

FIRST AID FACILITIES

Eye wash and safety shower

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

Although no specific exposure limits have been established for this material, the American Conference of Governmental Industrial Hygienists Inc. (ACGIH) has established a TLV/TWA: Total 3 mg/m³ for nuisance dusts. TLV (Threshold Limit Value) is the time weighted average concentration of the work atmosphere for a normal 8-hour day and a 40-hour week, to which nearly all workers can be repeatedly exposed day after day without adverse effect. TWA is the Time-Weighted Average airborne concentration over an 8-hour working day, for a 5-day working week over an entire working life. TLV and TWA values are issued as guidelines for good practice. All atmospheric contamination should be kept to, as low a level as is practically possible. These limits are stated only to indicate the **least** stringent airborne dust exposure levels applicable to nuisance dust. Dust from this product may cause irritation at exposure concentrations below these limits.

The oral LD₅₀ (rat) for BCDMH is 578 ppm. The primary skin irritation index is 6.1, indicating that the product is considered “corrosive to skin”.

ENGINEERING CONTROLS

Use adequate ventilation to maintain atmospheric dust and vapour concentration at lowest practicable level. Avoid generating and inhaling dusts.

PERSONAL PROTECTION

Avoid skin and eye contact. Wear overalls, chemical goggles, full-face shield, impervious gloves, rubber boots and rubber apron when working with large volumes. Use with adequate ventilation. If inhalation risk exists, wear respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and protective equipment before re-using.

FLAMMABILITY

Not combustible under normal circumstances. Dust explosion severity tests undertaken by the US Bureau of Mines determined that BCDMH is not ignitable.

STORAGE AND HANDLING

Reseal container after use and keep container tightly closed. Protect from extremes of temperature. Store in a cool, dry place away from acids, alkalis and other oxidising media such as calcium hypochlorite. Do not allow water to get into container. Keep containers off wet floors.

SPILLS AND DISPOSAL

Wear protective equipment to prevent skin and eye contamination and inhalation of dust. Contain spilled material and clean up immediately to prevent contamination of product. Keep spilled material dry if possible. Sweep, scoop, or vacuum all spilled material and contaminated soil, etc/. and place in clean dry containers for disposal. Keep unneutralised product out of sewers, watersheds and water systems.

For disposal, refer to the **State Land Waste Management Authority**. Incineration is recommended at approved waste incinerator if material is dry. Do not dispose of filled or partially filled containers in waste compactors. Common contaminants, such as oil, sawdust and floor sweeping compounds, can cause spontaneous decomposition if the material at ambient temperatures, resulting in rupture of containers. Do not re-use empty containers; triple-rinse and dispose of properly. Never transport wet material.

FIRE AND/OR EXPLOSION HAZARD

Not combustible under normal circumstances. In fires fuelled by other materials, this product may smoulder for prolonged periods, liberating dense black smoke.

Extinguishing Medium:

Use large amounts of water only; smothering is ineffective due to products' ability to supply oxygen under combustion. Due to the potential for violent reaction, do not use dry chemical or ammonium phosphate-based fire extinguishers.

Fire Fighting Instruction:

Fire Fighters or others exposed to products of combustion should wear full protective clothing including self-contained breathing apparatus. Thoroughly decontaminate clothing after use.

Hazardous Combustion:

Decomposes above 145°C liberating a range of toxic and corrosive gases, including bromine, chlorine, hydrogen bromine and hydrogen chloride; containers may rupture.

CONTACT INFORMATION

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Plumbers' Supplies Co-operative Ltd (02)9741 8999

Emergency Contact (24hr): 1800628724

DISCLAIMER

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