



# Safety Data Sheet

## Brominating Tablets

**BioGuard**

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### 1 IDENTIFICATION OF CHEMICAL

**Product Name:** Brominating Tablets  
**Chemical name:** Bromo – Chloro-5,5 dimethylhydantoin. (BCDMH)  
**Other names:** 1-Bromo-3-chloro-5,5 dimethylhydantoin.

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### 2 COMPOSITION

Ingredients:	Wt%	CAS No.	EEC No.	Phrases
Bromo – Chloro-5, 5 dimethylhydantoin	<94	32718-18-6	240-230-0	R8, 22, 31, 36/37 S1/2,8,26,41

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### 3 HAZARD IDENTIFICATION

**Oxidising agent:** May ignite combustible material.  
**Harmful:** Harmful if swallowed. Irritating to eye, skin and respiratory system.

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### 4 FIRST AID MEASURES

**Skin Contact:** Wash with soap and cold water for a minimum of 15 minutes. If skin irritation persists, seek medical attention.

**Eye contact:** Flush eyes with cold flowing water for at least 20 minutes. Seek medical attention immediately.

**Ingestion:** Drink large quantities of water. **DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.** Seek medical attention

**Inhalation:** Remove person to fresh air, rest and keep warm. In severe cases seek medical attention.

**Notes to Doctor:** Probable mucosal damage may contraindicate the use of gastric lavage.

**Note:** When seeking medical attention, always show the product label.

## 5 FIRE FIGHTING MEASURES

- General hazard:** This product should not be exposed to external heat sources. Excessive heat may cause self-sustaining decomposition with the potential evolution of heat and toxic gases. In addition, when in contact with another combustible material, this product will increase the burning rate of the combustible material. When ignited, this material will burn with the evolution of noxious gases.
- Extinguishing media:** **DO NOT** attempt to extinguish the fire without a self-contained breathing apparatus (SCBA). **DO NOT** let the fire burn. Flood with copious amounts of water or foam. **DO NOT** use ABC or other dry chemical extinguishers since there is a potential for a violent reaction.
- Decomposition products:** Hydrogen bromide, bromine, hydrogen chloride and chlorine may be released in a fire fuelled by other materials
- Fire fighting procedures:** Firefighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.
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## 6 ACCIDENTAL RELEASE MEASURES

Use appropriate personal protective equipment as detailed in section 8.

### Spillages and Leaks:

Mix with sand, transfer carefully to container and arrange for removal by disposal company. Wash site of spillage thoroughly with water and detergent.

For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages. If material has entered surface drains, it may be necessary to inform local authorities.

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## 7 HANDLING AND STORAGE

- Handling:** Strong oxidising material. **DO NOT MIX WITH OTHER CHEMICALS.** Avoid contact with water on concentrated material in the container. Also avoid contact with easily oxidisable organic material; ammonia, urea or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite; alkalis. Use clean dry utensils.
- Storage:** Keep this product in original, closed container when not in use. Store in a cool, dry, well ventilated area away from heat or open flame. **DO NOT** contaminate water, food or feed by storage or disposal or cleaning of equipment.
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## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: Authority	8hr TWA		15min STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
General nuisance dust EH40	--	10	--	--

**General:** General room ventilation plus local exhaust should be used to maintain exposure below TLV. Eye wash and emergency shower facilities recommended. Remove and wash contaminated clothing before reuse.

**PPE**

**Respiratory:** Use respiratory protection for general dust inhalation protection.

**Skin:** Wear rubber gloves when handling this product. Avoid contact with skin.

**Eyes:** Wear goggles or safety glasses with side shields when handling this product

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid

**Odour and appearance:** Off white tablet, faint halogen odour

**pH:** 3 – 3.5 (1% solution @ 25 °C)

**Melting point:** Sublimes at 145-160 °C approx.

**Solubility in water:** 0.15 (@25 °C)

**Specific gravity:** 0.96 g/cm<sup>3</sup>

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## 10 STABILITY AND REACTIVITY

**Conditions to avoid:** High temperature. Poor ventilation. Contamination. Moisture/high humidity.

**Stability:** This product is stable under normal conditions.

**Polymerisation:** Hazardous polymerisation will not occur under normal conditions.

**Decomposition product:** Chlorine containing gases can be produced.

**Incompatible materials:** Avoid contact with water on concentrated material in the container. Avoid contact with easily oxidisable material; ammonia, urea, or similar nitrogen containing compounds, strong acids and bases; inorganic reducing compounds; floor sweeping compounds; other swimming pool/spa chemicals in their concentrated form.

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## 11 TOXICOLOGICAL INFORMATION

**Acute toxicity:** Oral LD50 578 mg/kg (rat)

**Specific symptoms:** Dermal LD50 >2000 mg.kg (rabbit)

**Primary irritation:** Skin index 6.1

**Sensitisation:** Hydrolysis product DMH is non sensitising.

This product is an eye and skin irritant.  
This product is not listed as a carcinogen

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## 12 ECOLOGICAL INFORMATION

**Persistence / degradation information:** Hydrolyses in water. (Dimethylhydantoin. DMH)  
**Mobility and bioaccumulation potential:** PO/W 0.35 does not bioaccumulate  
**COD value:** 1005 mg/g (Value for DMH)

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## 13 DISPOSAL CONSIDERATIONS

**Disposal Method:** **DO NOT** put product, spilled product or filled or partially filled containers into the waste or waste compactor. Contact with incompatible materials could cause a reaction or fire. Disposal of unused, uncontaminated product is regulated according to local and national disposal legislation.

**Empty Containers:** **DO NOT** re-use container. Rinse thoroughly before discarding.

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## 14 TRANSPORT INFORMATION

**UN No:** 1479  
**Primary Hazard:** Oxidising solid (NOS)  
**Packing Group:** II  
**Hazard ID No:** 50  
**Class:** 5.1  
**EAC:** 1Y

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## 15 REGULATORY INFORMATION

**Product name:** Brominating Tablets  
**Hazard symbol:** Oxidising and Harmful  
**Risk Phrases:**  
R8 Contact with combustible material may cause fire.  
R22 Harmful if swallowed  
R31 Contact with acids liberates toxic gas.  
R36/37 Irritating to eyes and respiratory system.

**Safety Phrases:**  
S1/2 Keep locked up and out of reach of children  
S8 Keep container dry  
S26 In case of contact with eyes, rinse immediately with water and seek medical attention.  
S41 In case of fire and/or explosion do breathe fumes.

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## 16 OTHER INFORMATION

**Recommended uses and restrictions:** No further information

**Further information sources:** No further information

Sources of key data used to compile Safety Data Sheet.

Approved supply list. Approved carriage list, EH40.

**The data in this Safety Data Sheet has been supplied as required by the Chemicals (Hazard Identification and Packaging) Regulations 1997, as amended, for the purpose of protecting the health and safety of industrial users who are deemed capable of understanding and acting on the information provided. Please ensure that it is passed to the appropriate person(s) in your company, who are capable of acting on the information.**

**This data sheet does not constitute a users assessment of the workplace risk as required by the Health and Safety at Work Act, COSHH, Management of Health and Safety at Work or other health and safety legislation.**

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