

SAFETY DATA SHEET  
According to REACH Regulation (EC) No 1907/2006

### 1. Identification of the substance/preparation and of the company/undertaking

• <b>Trade Name:</b>	Bromine Tablets
• <b>Other names</b>	Bromochloro-5-5,dimethylhdantoin, BCDMH
• <b>Intended use of chemical</b>	For disinfection of pool and spa water.
• <b>Manufacturer/Supplier</b>	Complete Pool Controls Ltd Unit 2, The Park Stoke Orchard Bishops Cleeve Gloucestershire GL52 7RS  Tel: +44 (0) 8712 229081 Fax: +44 (0) 8712 229083
• <b>Contact E-mail for advice</b>	E-mail: <a href="mailto:sales@cpc-chemicals.co.uk">sales@cpc-chemicals.co.uk</a>
• <b>Emergency Telephone</b>	Tel: +44 (0) 8712 229081 (office hours)

### 2. Hazard Identification



Corrosive



N: Dangerous for the environment

R22	Harmful if swallowed
R31	Contact with acids liberates toxic gas.
R34	Causes burns
R43	May cause sensitisation by skin contact
R50	Very toxic to aquatic organisms.

### 3. Composition/information on ingredients

Ingredient	CAS No	EC No.	Symbol	%
Bromochloro-5-5,dimethylhydantoin	32718-18-6	251-171-5	C: N	96 - 99.5

### 4. First Aid measures

• <b>After inhalation:</b>	Move to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume the most comfortable position and keep warm. Keep at rest until fully recovered. If breathing is laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a facemask. Seek medical advice.
• <b>After skin contact:</b>	Wash with plenty of cold water for a minimum of 20 minutes. Remove contaminated clothing and wash before re-use.
• <b>After eye contact:</b>	Flush eyes with cold flowing water for at least 20 minutes with eyelids held open. Remove contact lens after first 5 minutes. Seek urgent immediate medical attention
• <b>After Ingestion:</b>	Immediately rinse mouth with water. Give water to drink. Seek immediate medical attention.

**Trade Name: Bromine Tablets**

**5. Fire fighting measures**

- **Special extinguishing media:** Dry powder, carbon dioxide, water spray (fog)
- **Special exposure hazards in fire:** May release poisonous and corrosive fumes of HBr, Nox and HCl. Oxidising agent. Forms explosive mixture with combustible, organic or other easily combustible material.
- **Special protective equipment:** Fire-fighters 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.

**6. Accidental release Measures**

- **Personal Protection** Use appropriate personal protective equipment as detailed in section 8
- **Environmental Protection** Do not allow to enter sewers/surface or ground water
- **Methods for cleaning:** Increase ventilation. Clear area of all unprotected personnel. Wear protective equipment. Work upwind. Sweep up, place in bag and hold for waste disposal. Avoid raising dust.

**7. Handling and storage**

- **Personal Protection** Oxidising agent. **DO NOT MIX WITH OTHER CHEMICALS.** Mix only with water. Never add water to product. Always add product to water. Use clean dry dispensing equipment.
- **Storage** Keep this product in original, sealed container when not in use. Store in a cool, dry, well-ventilated area. Store away from combustible materials, any easily oxidisable matter, strong acids and alkalis, oxidising agents and foodstuffs.

**8. Exposure control/personal protection**

- **Exposure control limits:** No value assigned for this product
- **Hand Protection** Wear suitable chemical resistant gloves e.g. PVC
- **Eye Protection** Wear appropriate safety goggles
- **Skin Protection** Avoid contact with skin.
- **Respiratory Protection** Use respiratory protection for dust inhalation protection.
- **General** General room ventilation plus local exhaust should be used to maintain

**Trade Name: Bromine Tablets****9. Physical and chemical properties**

- **Appearance at 20°C** White to off white tablet
- **Odour** Faint halogen odour
- **Vapour Pressure at 20°C**  $9.35 \times 10^{-3}$
- **pH (conc)**
- **Melting Point** Thermal decomposition above 160°C
- **Specific Gravity** 1.8 - 2
- **Solubility in water** 0.2g/100ml 25°C

**10. Stability and reactivity**

- **Stability** Stable under normal temperature conditions and recommended use
- **Conditions to avoid** Oxidising agent. Forms explosive mixtures with combustible, organic or other easily oxidisable materials. Avoid heat and direct sunlight. Avoid contact with moisture.
- **Materials to avoid** Strong oxidising substances. Strong alkalis. Flammable/combustible material.
- **Decomposition products** Hydrogen bromide (HBr). Hydrogen chloride (HCl). Oxides of Nitrogen (Nox)

**11. Toxicological Information**

- **Inhalation** Irritating to respiratory system.
- **Ingestion** Harmful if swallowed
- **Skin** Irritant to the skin, overexposure may cause skin sensitization.
- **Eyes** Risk of serious damage to eyes
- **Toxicity**

Oral LD50	929 mg/kg	(rat)
Dermal LD50	>2000 mg/kg	(rat)
Inhalation LD50	0.53mg /¼ hr	(rat)

Mutagenic by Ames Test.

**Trade Name: Bromine Tablets****12. Ecological Information****Aquatic toxicity**

<b>LC50 96 hours, fish</b>	Eastern oyster (acute flow through) = 1.2 mg/l Mysid shrimp (acute flow through) = 1.9 mg/l Rainbow trout (static) = 0.4 mg/l Bluegill sunfish (static) = 0.46 mg/l Sheepshead minnow (acute flow through) = 1.6 mg/l 0.75 mg/l (static)
<b>EC50, 48 Hrs, Daphnia magna</b>	

**Avian toxicity**

<b>Oral LD50</b>	Bobwhite quail = 1839 mg/kg
<b>Dietary LC50</b>	Mallard duck > 5620ppm
<b>Dietary LC50</b>	Bobwhite quail > 5620ppm

- **Mobility** Water soluble.

This product is toxic to fish and aquatic organisms. **DO NOT** discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans or their waters unless in accordance with the applicable regulatory requirements. **DO NOT** discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority.

**13. Disposal Considerations**

- **Substance** **DO NOT** put product, spilled product or filled or partially filled containers into the waste or waste compactor. Disposal of unused, uncontaminated product is regulated according to local and national disposal legislation.
- **Container** **DO NOT** re-use container. Rinse thoroughly before discarding.

**14. Transport Information**

- **UN No** UN 3085
- **Proper shipping name** Oxidizing solid, corrosive, n.o.s. (Bromochloro-5-5, Dimethylhdantoin)
- **Class/division** 5.1 (Oxidising Agent)
- **Packing group** III
- **Hazard I D No** 50
- **EAC** 1W
- **Hazard Label(s)** 5.1 + 8 + Environmentally Hazardous Substance Mark
- **Pollutant** Yes

**Trade Name: Bromine Tablets****15. Regulatory information**

• <b>Product Name</b>	Bromine Tablets	
• <b>Symbol</b>	C: N	
• <b>Indications of danger</b>	Corrosive/Dangerous for the Environment	
• <b>Risk phrases</b>	R22	Harmful if swallowed
	R31	Contact with acids liberates toxic gas.
	R34	Causes burns
	R43	May cause sensitisation by skin contact
	R50	Very toxic to aquatic organisms.
• <b>Safety phrases</b>	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.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S41	In case of fire and/or explosion <b>DO NOT</b> breathe fumes.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
	S60	This material and/or its container must be disposed of as hazardous waste.
• <b>Legislation</b>	This safety sheet is provided in compliance with the REACH Regulation (EC) No 1907/2006 and classification is per The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 that is applicable until 1st December 2010	

**16. Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Revision 3: August 2009

Classification changed to include symbol N, inclusion of new Environmentally Hazardous Mark for transport for packagings larger than 5kg and other minor editorial amendments.