



SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name	Halobrom T-30	
Product id	8424TMU	
Revision date	10/05/2014	Revision: 9
Supersedes	04/10/2010	

1. Identification of the substance & the company

Chemical name	Bromo-chloro-5,5-dimethylhydantoin
Synonym(s)	BCDMH, Halobrom
Chemical formula	$C_5H_6BrClN_2O_2$
Chemical family	Halogenated hydantoin
Molecular weight	241.5
Type of product and use	Swimming pool and Spa disinfectant
Supplier	ICL-IP America Inc. 95 MacCorkle Ave. SW, South Charleston, WV 25303, USA Toll Free Number: 1-800-811-2327
Emergency Telephone	Chemtrec (800)424-9300 Medical (800)420-9236

2. Hazards identification

GHS classification	Acute Tox. 4, H302 Harmful if swallowed Skin Corr. 1B, H314 Causes severe skin burns and eye damage Skin Sens. 1, H317 May cause an allergic skin reaction Aquatic Acute 1, H400 - Very toxic to aquatic life
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Labels and other form of warning

Symbol(s)



Signal Word

DANGER



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Hazard statements
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H400 - Very toxic to aquatic life
EUH031 - Contact with acids liberates toxic gas

Precautionary statements
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
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 or doctor/physician
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P362 + P364 - Take off all contaminated clothing and wash it before reuse
P391 - Collect spillage

P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P272 - Contaminated work clothing should not be allowed out of the workplace
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P330 - Rinse mouth
P405 - Store locked up
P501 - Dispose of contents/container in accordance with national and international regulations

NFPA Ratings (Scale 0-4) Health = 3, Fire = 0, Reactivity = 1. Special Hazard Warning: OXIDIZER.
HMIS Ratings (Scale 0-4) Health = 3, Fire = 0, Reactivity = 1.

3. Composition / information on ingredients

Components	CAS No.	Weight %
Bromochloro-5,5-dimethylhydantoin	32718-18-6	96-99.5



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4. First-aid measures

Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Call poison control center, or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, acute or delayed

- Eye Contact	Corrosive May cause temporary or permanent eye damage.
- Skin contact	Exposure to wet skin may cause severe irritation May cause skin sensitization
- Inhalation	Irritant to upper respiratory tract. Shortness of breath, headache and nausea.

Note to physician	Corrosive No specific antidote. In case of ingestion DO NOT induce vomiting. Treat symptomatically and supportively. Probable mucosal damage may contraindicate the use of gastric lavage.
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5. Fire - fighting measures

Suitable extinguishing media	Dry powder or carbon dioxide. Water may be ineffective. In case of exothermic decomposition and appearance of smoke, water should be used to suppress it.
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Extinguishing media not to be used Do not use dry chemical extinguisher containing ammonia compounds.

Unusual fire and explosion hazards Forms explosive mixtures with combustible, organic or other easily oxidizable materials. When heated to decomposition, may release poisonous and corrosive fumes. Dust may form a weak explosive mixture with air (class St1), but is not sensitive to ignition from electrostatic discharges.

Fire fighting procedure Cool containers with water spray. In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode.

6. Accidental release measures

Personal precautions Evacuate area. Use respirator with combined filter (inorganic gas and dust), gloves, chemical safety goggles and body covering clothes. If material is decomposing, use self-contained breathing apparatus and a fully encapsulated suit.

Methods for cleaning up Sweep up, place in a suitable container and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Environmental precautions Prevent entry into sewers and watercourses

7. Handling and storage

Handling Keep containers tightly closed.

Storage Keep away from all sources of ignition. Recommended storage temperature below 30°C. For transportation purposes it is possible to store at temperatures up to 50°C. Store in a dry, well-ventilated area. Store away from incompatible materials (see "materials to avoid").

8. Exposure controls / personal protection

Exposure Limits :

Components	ACGIH-TLV Data	OSHA (PEL) Data
Bromochloro-5,5-dimethylhydantoin 32718-18-6	Not determined	Not determined

Manufacturer's TLV-TWA Recommendation 0.1 mg/m³



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Ventilation requirements Use local exhaust as necessary, especially under dusty conditions. Ventilation must be sufficient to maintain atmospheric concentration below recommended exposure limit.

Personal protective equipment:

- **Respiratory protection** Respirator with combined filter (inorganic gas and dust).
- **Hand protection** Neoprene gloves
- **Eye protection** Chemical safety goggles
- **Skin and body protection** Body covering clothes and boots

Hygiene measures Do not eat, smoke or drink where material is handled, processed or stored. Wash hands thoroughly after handling and before eating or smoking. Safety shower and eye bath should be provided.

9. Physical and chemical properties

Appearance	White to off-white tablet with faint halogenous odour
Melting point/range	Not applicable (decomposes)
Boiling point/range	Not applicable
Flash point	Not applicable
Evaporation rate (ether=1)	Not applicable under standard conditions
Flammable/Explosion limits	Not available
Vapor pressure	9.35x10 ⁽⁻³⁾ Pa (25°C)
Vapor density	Not applicable under standard conditions
Solubility:	
- Solubility in water	0.22 g/100ml at 25°C
- Solubility in other solvents	Benzene: 2.5 g/100g at 25°C
Partition coefficient (n-octanol/water)	Kow = <1 (pH 5-9)
Auto-ignition temperature	Not available
Decomposition temperature	>160°C
Specific gravity	1.8-2.0
Explosive properties	Dust may form a weak explosive mixture with air (class St1), but is considered insensitive to ignition from electrostatic discharges.
Oxidising properties	Not sufficient for classification as oxidizer (Method A17 & UN Test O.1)
Particle size	Not available

10. Stability and reactivity

Reactivity	Combustible materials. Oxidizing agents. Bases.
Stability	Stable under normal conditions



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Possibility of hazardous reactions	Contact with combustible materials may initiate decomposition of the material and emission of smoke.
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Conditions to avoid	Exposure to moisture. Heating above decomposition temperature.
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Materials to avoid	COMBUSTIBLE ORGANIC MATERIALS Bases Oxidizing agents
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Hazardous decomposition products	CO, HBr, Cl ₂ , NO _x , HCl, CO ₂
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11. Toxicological information

Likely Routes of Exposure	Skin Eye contact Inhalation
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Acute toxicity:

- Rat oral LD ₅₀	929 mg/kg
- Rat inhalation LC ₅₀	1.1 mg/l/4 hour (powder)
- Dermal irritation (rabbit)	Corrosive

Dermal sensitization	Sensitizer.
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Chronic toxicity	Prolonged skin contact may cause sensitization
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Mutagenicity	Mutagenic by the Ames Test Mutagenic in the mouse lymphoma L5178Y test system. Non genotoxic in an in-vivo micronucleus test in mice Non genotoxic in an in-vivo liver unscheduled DNA synthesis (USD) assay
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Carcinogenicity	Not classified by IARC Not included in NTP 12th Report on Carcinogens
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12. Ecological information

Aquatic toxicity :	
- 96 Hour-LC ₅₀ , Fish	1.2 mg/l (Eastern oyster, Acute flow through) 1.9 mg/l (Mysid shrimp, Acute flow through) 0.4 mg/l (Rainbow trout, Static) 0.46 mg/l (Bluegill sunfish, Static) 1.6 mg/l (Sheepshead minnow, Acute flow through)



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- 48 hour-LC50, Daphnia magna 0.75 mg/l (Static)

Avian toxicity:

- Oral LD50, Bobwhite quail	1839 mg/kg
- Dietary LC50, Mallard duck	>5620 ppm
- Dietary LC50, Bobwhite quail	>5620 ppm

Persistence and degradability BCDMH and the main degradation product DMH are biodegradable and do not persist in the environment

Bioaccumulative potential Based on low Kow values, i.e less than 1, BCDMH would not be predicted to significantly accumulate in aquatic organisms, or sorb to organic material in soil or sediment.

Mobility in soil There will be no exposure of BCDMH to soil. The main degradation product DMH is mobile in soil.

Germany, water endangering classes (WGK) 2

13. Disposal considerations

Waste disposal Dispose of in approved landfill sites or an approved incinerator. Avoid access to streams, lakes or ponds. Observe all federal, state and local environmental regulations when disposing of this material.

Disposal of Packaging Crush and bury empty containers. Do NOT throw into public waste disposal site. Avoid contact with organic materials and moisture. See conditions to avoid (Section 10)

14. Transportation information

DOT UN number 1479
Proper shipping name: Oxidising Solid, n.o.s.
(Bromo-Chloro-5,5-DimethylHydantoin)
Class: 5.1 - Oxidizing substances
Label: OXIDIZER (5.1)
Packing Group II
Marking: Marine Pollutant



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15. Regulatory information

USA This product is registered under FIFRA (CAS #16079-88-2)
TSCA: EPA Number P-94-34
Subject to reporting under SNUR (Significant New Use Rule) -any use, 60 CFR 11037

- **EPA Registration no.** 8622-41

- **Emergency overview in accordance to EPA Master Label** DANGER
Corrosive
Causes irreversible eye damage and skin burns
Eye contact may cause loss of vision
Harmful if inhaled
Irritating to nose and throat
Harmful if absorbed through skin or swallowed
This product is toxic to fish and aquatic organisms.
Strong oxidizing agent

- **SARA 313** This product does not contain a chemical listed at or above de minimis concentrations

- **SARA (311, 312)** This product is a hazardous chemical under 29CFR 1910.1200, and categorized as an immediate and delayed health, and reactivity physical hazard

- **Waste Classifications** Not listed under CERCLA. If this product becomes a waste, it meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D001.

EU Reported in EINECS

EC No. 251-171-5

Japan ENCS No. 5-6368

New Zealand Inventory Listed in NZIoC

China
- **China inventory** Listed in IECSC

Philippines Listed in PICCS



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16. Other information

This data sheet contains changes from the previous version in section(s)
2, 4, 5, 6, 8, 9, 10, 12, 15

All sections reformatted in accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Health, Safety & Environment Policy

We will strive to ensure that our operations and products meet the needs of the present global community without compromising the ability of future generations to meet their needs. We accept that the success of our business is dependent on the supply of products and services that will benefit society whilst ensuring human safety and protection of the environment and natural resources. Within the framework of our commitment to the Responsible Care program, we will provide a healthy and safe work environment for employees and will responsibly manage our products at all stages of their life cycle in order to protect human health and the environment whilst maintaining high production standards of operation.

TO MEET THIS COMMITMENT WE WILL: Comply with or exceed applicable national and international regulatory requirements and other requirements to which we subscribe. Communicate openly and actively encourage dialogue with employees, customers and community concerning our products and operations. Implement documented management systems consistent with and for promotion of the Responsible Care ethics.

Develop and supply products that can be manufactured, transported, used and disposed of safely whilst best meeting the needs of our customers. Regularly assess, continually improve and responsibly manage health, safety and environmental risks associated with products and processes throughout their life-cycles. Share knowledge and expertise with others and seek to learn from and incorporate improved practices into our own operations.

Educate and train employees, contractors and customers to improve their HSE performance. Communicate up-to-date information to enable our workers, customers and other interested parties to handle our products in a safe and environmentally responsible manner. Endeavor to work with customers, suppliers, distributors and contractors to foster the safe use, transport and disposal of our chemicals. Support Product Stewardship programs in cooperation with customers, distributors and transporters.

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In an event of discrepancy between the contents of this SDS and the English version of it, the English version shall prevail.



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End of safety data sheet