

Material Safety Data Sheet



BROMINE TABLETS

SECTION I - IDENTIFICATION

MANUFACTURER'S NAMEHaviland Consumer Products Inc.
MANUFACTURER'S ADDRESS421 Ann St., NW, Grand Rapids, MI 49504
PHONE NUMBER..... (616) 361-6691
EMERGENCY PHONE NUMBER.....CHEMTREC (800) 424-9300
EFFECTIVE DATE.....7/26/2002
TRADE NAME.....**BROMINE TABLETS**
CHEMICAL FAMILY.....Bromine Compound

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	OSHA PEL	TLV (Units)	CAS NUMBER
Bromochloro-5, 5-dimethylhydantoin	Not Established	Not Established	32718-18-6

SECTION III - PHYSICAL DATA

BOILING POINT Not Applicable
FREEZING POINT Not Applicable, Decomposes
VAPOUR PRESSURE..... Not Applicable
VAPOUR DENSITY (air=1) Not Applicable
SOLUBILITY IN H₂O 2 g/100g @ 25oC
ODOUR AND APPEARANCE White Tablets; Halogen Odor
SPECIFIC GRAVITY 1.8 - 2.0
pH..... No Information Available

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT AND METHOD OF DETERMINATIONNot Flammable
LOWER EXPLOSIVE LIMIT (% by Volume) Not Applicable
UPPER EXPLOSIVE LIMIT (% by Volume) Not Applicable
MEANS OF EXTINCTION.....Carbon dioxide, dry chemical, water spray.
SPECIAL FIRE FIGHTING PROCEDURES.....Firefighters and subjected personnel should wear full protective clothing and self-contained breathing apparatus. Hydrogen bromide or bromine may be released in fires.
UNUSUAL FIRE HAZARD.....Oxidizing material. Forms explosive mixtures with combustible, organic or other easily oxidizable materials. Combustion generates toxic fumes of hydrogen bromide, bromine gas, nitrogen oxides and hydrogen chloride.

SECTION V - HEALTH HAZARD DATA

CARCINOGENICITY, REPRODUCTIVE EFFECTS None
NTP?..... No
IARC MONOGRAPHS?..... No
OVER EXPOSURE EFFECTS Eye Contact: Severe irritation. Corneal burns on prolonged contact with dust or concentrated suspension. Skin Contact: Prolonged skin contact may cause reddening and superficial necrosis. Burns may be severe if skin is wet or damp. Inhalation: Irritates mucous membranes. Dust will

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PRIMARY ROUTE (S) OF ENTRY	burn respiratory tissues severely. Ingestion: Like inhalation, will burn digestive tract tissues severely.
SPECIFIC FIRST AID PROCEDURES	Inhalation, contact In case of eye contact: Flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water; wash contaminated clothing before reuse. Do not take clothing home to be laundered. If inhaled: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention. If swallowed: Give two glasses of water to drink. Never give anything by mouth to an unconscious person. Get immediate medical attention.
EXPOSURE AGGRAVATED MEDICAL CONDITIONS	Dermatitis which may be aggravated by exposure.

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY	Stable under normal conditions
CONDITIONS TO AVOID	Mixing with anything but water. Heating above 160oC.
INCOMPATIBLE MATERIALS.....	Paints, petroleums and organic chemicals; oxidizing agents, and bases.
HAZARDOUS DECOMPOSITION PRODUCTS.....	Bromine and chlorine containing gases, hydrogen bromide and hydrogen chloride.
HAZARDOUS POLYMERIZATION	Will Not Occur
POLYMERIZATION AVOID	Not Applicable

SECTION VII - SPILL OR LEAK PROCEDURE

LEAK AND SPILL PROCEDURES.....	Use protective goggles with side-shield, dust respirator and rubber gloves. Prevent dusting either shovel/sweep into clean, intact packaging for possible re-use or hose down concentrated spills.
WASTE DISPOSAL.....	Follow state and/or local ordinances. Dispose in approved landfill sites or an approved incinerator. Triple rinse the container then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incinerate.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION	Dust respirator essential if dusting occurs.
VENTILATION	Use local exhaust ventilation with a minimum capture velocity of 150 ft/min. at the point of dust or mist evolution.
PROTECTIVE GLOVES.....	Rubber or other impervious materials.
EYE PROTECTION.....	Chemical splash proof goggles.
OTHER PROTECTIVE EQUIPMENT	A safety shower and eye bath should be available. For operations where spills or splashing may occur, use an impervious body covering and boots.
HANDLING PROCEDURES AND EQUIPMENT	Handle containers with care and keep them well closed. Containers retain product residue. Store in dark, cool; dry locations away from energy sources and incompatible materials.

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS	OXIDIZER, 5.1, PG II
DOT SHIPPING NAME.....	Oxidizing Substances, Solid, NOS, (Bromochloro-5, 5-Dimethylhydantoin)
UN NUMBER	UN1479
REPORTABLE QUANTITY (RQ).....	Not Listed

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REFERENCES

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This product is toxic to fish and aquatic life. Do
Not discharge into lakes, streams, or other
waterways.

EPA REG.# 57787-24