**SECTION 1** 

#### MATERIAL NAME / IDENTIFIER

BROMINE TABS – BROMINATING TABLETS WHMIS: Not regulated under WHMIS. It is regulated under Pest Control Product Act (PCP)

Manufacturer's Name: Street Address: City: Postal Code:	CAPO INDUSTRIES LTD 1200 CORPORATE DRIVE BURLINGTON, ONTARIO L7L 5R6
Emergency Telephone:	Canutec (613) 996-6666 (Collect)
Chemical Name:	1-Bromo-3-Chloro-5,5-Dimethylhydantoin
Chemical Family:	Not Applicable
Chemical Formula:	Not Applicable
Trade Name & Synonyms:	Not Applicable
Molecular Weight:	Not Applicable
Material Use:	Pool water disinfectant

## **SECTION 2**

#### HAZARDS IDENTIFICATION

GHS classification:

Oxidizing solid, Category 2 Acute toxicity, oral, Category 4 Skin corrosion/irritation, Category 1C Skin Sensitization, Category 1 Hazardous to the aquatic environment, acute hazard, Category 1

Symbol(s):



Signal Word:DangerHazard statements:H272 May intensify fire; oxidizer.<br/>H302 Harmful if swallowed.<br/>H314 Causes severe skin burns and eye damage.<br/>H317 May cause allergic skin reaction.<br/>H400 Very toxic to aquatic life.

	SAFETY DATA SHEET
Precautionary statements:	P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P220 Keep away from clothing and other combustible materials.
	P221 Take any precaution to avoid mixing with combustibles.
	P260 Do not breathe dust.
	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.
	P273 Avoid release to the environment.
	P280 Wear protective gloves/protective clothing/eye protection/face protection.
	P301+P312 IF SWALLOWED Call a POISON CENTER or doctor/physician if you feel
	unwell.
	P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P302+P352 IF ON SKIN: Wash with plenty of water.
	P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminate
	clothing. Rinse skin with water/shower.
	P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position
	comfortable for breathing.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remo
	contact lenses, if present and easy to do. Continue rinsing.
	P310 Immediately call a POISON CENTER or doctor/physician.
	P321 Specific treatment (see first aid on this label).
	P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
	P362+P364 Take off contaminated clothing and wash it before reuse.
	P363 Wash contaminated clothing before reuse.
	P370+P378 In case of fire: Use water spray for extinction.
	P391 Collect spillage.
	P405 Store locked up.
	P501 Dispose of contents/container in accordance with local regulations.

**HMIS:** 3 Health hazard, 0 Flammability, 1 Reactivity **NFPA:** 3 Health hazard, 0 Flammability, 1 Instability

SECTION 3	COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient

% Concentration

1-Bromo-3-Chloro-5,5-Dimethylhydantoin

16079-88-2

60-100

# SECTION 4 FIRST AID MEASURES Inhalation: Remove person to fresh air. Obtain medical aid. Administer artificial respiration if required. Skin Contact: Flush with plenty of water, then wash with soap and water. Wash contaminated clothing before reuse. Eye Contact: Flush eyes with plenty of water for 15 minutes. Seek medical attention. Ingestion: Drink 2 to 3 glasses of water. Obtain medical assistance immediately. Do not induce vomiting. If vomiting occurs, give fluids again. Have physician determine if patients condition allows the induction of vomiting.

**Note to physicians:** Probable mucosal damage may contraindicate the use of gastric lavage.

# SECTION 5FIRE – FIGHTING MEASURESHazardous Combustion Products:If fire is fueled by other materials, may release bromine gas.Unusual Fire or Explosion Hazards:None known.

endedair ne er Explosion nazaras.	
Sensitivity to Mechanical Impact:	None
Rate of Burning:	Not applicable
Explosive Power:	Not applicable
Sensitivity to Static Discharge:	None
Fire Extinguishing Media:	Flood with large amounts of water.
Instructions to the Fire Fighters:	In large fires fueled by other materials, this product may smolder for
	prolonged periods emitting a dense black smoke. Do not let fire burn.
Fire Fighting Protective Equipment:	In the event of fire, wear self-contained breathing apparatus.
	Thoroughly decontaminate fire fighting equipment including all fire
	fighting wearing apparel after the incident.

### **SECTION 6**

# ACCIDENTAL RELEASE MEASURES

Leak And Spill Procedure:Using appropriate protective clothing and safety equipment, contain spilled<br/>Material. Do not add water to spilled material. Using clean dedicated equipment,<br/>Sweep and scoop all spilled material into clean container for disposal. Do not close<br/>Containers containing wet or damp material. They should be left open to disperse<br/>Any hazardous gases that may form. Wash spill area with copious amounts of water.<br/>Wet spills should be collected and the Halogen neutralized.

# **SECTION 7**

#### HANDLING AND STORAGE

HANDLING	
Handling Practices:	Strong oxidizing agent. Avoid contact with skin, eyes and clothing. Do not mix with
	anything except water.
Ventilation Requirements:	General exhaust ventilation.
Other Precautions:	Contamination with moisture, organic matter or other chemicals may start a chemical
	reaction and generate heat, hazardous gas, possible fire and explosion.
STORAGE	
Ventilation Requirements:	Cool and well ventilated area away from heat and sunlight.
Storage Requirements:	Store in original container. Keep out of reach of children and keep away from
	animals.

# **SECTION 8**

# EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS	
Engineering Controls:	Local exhaust to remove dust.
PERSONAL PROTECTIVE EQUIP	PMENT
Skin (Specify):	Neoprene or rubber gloves.
Eye (Specify):	Safety glasses.
Respiratory (Specify):	Organic vapour mask if prolonged use in non-ventilated area is unavoidable.
Other (Specify):	Wear protective clothing to minimize skin contact.

# **SECTION 9**

# PHYSICAL DATA FOR MATERIAL

Physical State:	Gas	Liquid	;
Odour & Appearance:	Opaque, white, mild bromine odour.		
Odour Threshold (ppm):	Not applicable		
Flammability:	Yes	No	<u>X</u>
If Yes, Under Which Conditions?:			
Auto Ignition Temperature (Celsius):	Not available		
Lower Explosion Limit (% By Volume	<b>/olume):</b> Not applicable.		
Upper Explosion Limit (% By Volume	): Not applicable		
Decomposition Temperature (°C):	Decomposes a	165°C	
Specific Gravity:	Not applicable		
Viscosity (cps):	Not applicable		
Vapour Pressure (mm):	Not applicable		

Vapour Density (Air-1):	Not applicable
Flashpoint (°C)	Not flammable
Evaporation Rate	Not applicable
Boiling Point (°C):	Not applicable
Freezing Point (°C):	120 - 148°C
Solubility In Water (20°C):	0.54 g/100 g @ 24°C
% Volatile (By Weight)	<0.5%
PH:	Not available
Coefficient Of Water/Oil Distribution:	Not applicable

# STABILITY AND REACTIVITY

Chemical Stability:	Yes	<u>x</u>	Νο
If No, Under Which Conditions?:	Not application	able	
Incompatibility To Other Substances:	Yes	<u>X</u>	Νο
If So, Which Ones:	Strong acids and alkalis, high storage temperatures, organic materials		
	Ammonia bearing compounds, strong reducing agents and moisture.		
Conditions to Avoid:	Do not mix with anything other than water.		
Hazardous Decomposition Products:	CO, CO2, Bromine gas plus unknown toxic gases.		

# **SECTION 11**

**SECTION 10** 

# **TOXICOLOGICAL INFORMATION**

ACUTE HEALTH EFFECTS			
Inhalation:	Causes respiratory tract irritation.		
Skin Contact:	Causes skin burns. O	n contact with moisture, this material readily hydrolyzes to acid	
	which may result in bu	urns if not promptly removed.	
Eye Contact:	Causes serious eye d	amage.	
Ingestion:	Harmful is swallowed.		
Chronic Exposure:	None known.		
Other Health Effects:	None known.		
LD 50 of Material (Specify Spe	ecies and Routes)	Oral, Rat: 578 mg/kg, Dermal, Rabbit: >2000 mg/kg	
LC 50 of Material (Specify Spe	ecies and Routes)	Inhalation, Rat: Not Available	
Exposure (Limits):	Not available		
Irritancy of Material	Irritant to skin, e	yes and mucous membranes.	
Sensitization of Material	Sensitization ma	y be induced through repetitive contact.	
Synergistic Materials	None known.		
Carcinogenicity, Mutagenicity	v, Reproductive Effect	s, Teratogenicity: None known.	

SECTION 12	ECOLOGICAL INFORMATION
Ecotoxicity:	Toxic to fish and aquatic organisms.
Toxicity to fish	
Rainbow trout:	LC50: 0.65 mg/l
	Exposure time: 96 h
Daphnia:	LC50: 0.87 mg/l
	Exposure time: 48 h

Bioaccumulation: No data available Biodegradability: Readily biodegradable Mobility In Soil: Not available.

SECTION 13	DISPOSAL CONSIDERATIONS
Deactivating Chemicals:	None required.
Waste Disposal:	Remove spilled, contaminated or left over material to approved landfill site or dispose
	material in accordance with Federal, Provincial or local government regulations.
Safe Handling of Residues:	Same as above.
Disposal of Packaging:	Do not re-use empty containers. Rinse thoroughly before discarding in trash.

# SECTION 14

TRANSPORTATION INFORMATION

DOT	
UN number	: 3085
Description of the goods	: OXIDIZING SOLID, CORROSIVE, N.O.S. (1-Bromo-3-Chloro-5,5-Dimethylhydantoin)
Class	: 5.1
Packing Group	: 111
Labels	: 5.1 (8)
Environmentally hazardous	: no

Т	DG

UN number	: 3085
Description of the goods	: OXIDIZING SOLID, CORROSIVE, N.O.S.(1-Bromo-3-Chloro-5,5-Dimethylhydantoin)
Class	: 5.1
Packing Group	: 111
Labels	: 5.1 (8)

Environmentally hazardous : no

#### IATA

UN number	: 3085
Description of the goods	: OXIDIZING SOLID, CORROSIVE, N.O.S.(1-Bromo-3-Chloro-5,5-Dimethylhydantoin)
Class	: 5.1
Packing Group	: 111
Labels	: 5.1 (8)
Environmentally hazardous	: no

#### IMDG

UN number	: 3085
Description of the goods	: OXIDIZING SOLID, CORROSIVE, N.O.S.(1-Bromo-3-Chloro-5,5-Dimethylhydantoin)
Class	: 5.1
Subsidiary hazard class	: 8
Packing Group	: 111
EmS Number 1	: F-A
EmS Number 2	: S-Q
Marine pollutant	: yes
Environmentally hazardous	: yes

# **SECTION 15**

# **REGULATORY INFORMATION**

#### CANADA

DSL/NDSL Complies WHMIS: E, C

#### USA

**TSCA** Complies

SARA 311/312 Hazard Categories: Acute health hazard

California Proposition 65: This product does not contain any Proposition 65 chemicals.

**EPA Statement:** This chemical is a pesticide product registered by the EPA and is subject to certain labeling requirements under federal pesticides law.

**INTERNATIONAL:** Not available

SECTION 16	OTHER INFORMATION		
Prepared By (Group, Department, Etc.):	Quality Control	Telephone:	(905) 332-6626

January 1, 1996

December 1, 2018

Additional Notes Or References:

**Preparation Date:** 

Date Revised:

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