

SpaGuard® Brominating Tablets for Spas & Hot Tubs

Version:	1.3
Revision Date:	09/17/2008
Print Date:	09/18/2009

The recipient of this Safety Data Sheet is urged to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents and contractors of the information on this sheet,(2) furnish a copy to each of your customers for the product, and (3) request your customers to inform their employees and customers as well.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SpaGuard® Brominating Tablets for Spas & Hot Tubs
Product Use Description: Recreational Water Product
Chemical nature: Halogenated hydantoin
EPA Registration Number: 5185-420

Company: Bio-Lab, Inc.
BioGuard
P.O. Box 300002
Lawrenceville, GA
30049-1002

Emergency telephone: CHEMTREC (US Transportation) :
(800) 424-9300
(703) 527-3887
Poison Control Center (Medical) :
(877) 800-5553

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Customer Service: (800) 859-7946

Prepared by: Product Safety Department
(US) +1 866-430-2775
(EU) +44 (0) 1753.603.000
Email: MSDSRequest@chemtura.com

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

Form: tablet
Colour: white
Odour: Faint Halogen.

Corrosive
Oxidizer
Causes severe eye damage.
Causes skin burns.

OSHA Hazards:
THIS MATERIAL IS HAZARDOUS UNDER THE
CRITERIA OF THE FEDERAL OSHA HAZARD
COMMUNICATION STANDARD 29CFR 1910.1200.

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Harmful if swallowed.
Causes respiratory tract irritation.
Avoid breathing dust or vapor.
Do not get in eyes, on skin, or on clothing.

Potential Health Effects

- Primary Routes of Entry : Skin contact
Eye contact
Inhalation
Ingestion
- Aggravated Medical Condition : Respiratory disorders
Skin disorders
- Inhalation : Causes respiratory tract irritation.
- Skin : Causes skin burns.
On contact with moisture, this material readily hydrolyzes to acid which may result in burns if not promptly removed.
- Eyes : Causes severe eye damage.
- Ingestion : Harmful if swallowed.
- Chronic Exposure : None known.

SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component	CAS-No.	Concentration
1-bromo-3-chloro-5,5-dimethylhydantoin	16079-88-2	96 %

SECTION 4. FIRST AID MEASURES

First aid procedures

- Inhalation : Remove to fresh air.
If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
Call a physician or poison control centre immediately.
- Skin contact : Remove contaminated clothing and shoes.
Rinse immediately with plenty of water for at least 15 minutes.
Call a physician or poison control centre immediately.

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- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.
Call a physician or poison control centre immediately.
- Ingestion : Call a physician or poison control centre immediately.
Have person sip a glass of water if able to swallow.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Do not give anything by mouth to a convulsing or unconscious person.

Notes to physician

- Treatment : Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

- Flash point : not applicable

Protective equipment and precautions for firefighters

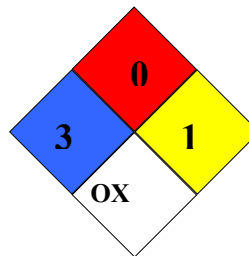
- Suitable extinguishing media : Flood with large volumes of water.
- Unsuitable extinguishing media : ABC powder
Dry chemical
Risk of violent reaction.
- Hazardous combustion products : Hydrogen halides
Bromine
Chlorine
Carbon oxides
nitrogen oxides (NOx)
- Further information : In large fires fueled by other materials, this product may smolder for prolonged periods emitting a dense black smoke.
Do not let fire burn.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

Further information

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NFPA Classification : Health Hazard: 3
Fire Hazard: 0
Reactivity Hazard: 1
Specific hazards: OX Class
2 Oxidizer.



SECTION 6. ACCIDENTAL RELEASE MEASURES

- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods for containment / Methods for cleaning up : Using appropriate protective clothing and safety equipment, contain spilled material.
Do not add water to spilled material.
Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry containers for disposal.
Do not close containers containing wet or damp material. They should be left open to disperse any hazardous gases that may form.
- Additional advice : Do not use floor sweeping compounds to clean up spills.
Do not transport wet or damp material.
Treat recovered material as described in the section "Disposal considerations".

SECTION 7. HANDLING AND STORAGE

- Handling
- Advice on safe handling : Strong oxidizing agent.
Avoid contact with skin, eyes and clothing.
Avoid breathing dust.
Avoid breathing vapors.
Do not mix with other chemicals.
Mix only with water.
Never add water to this product.
Always add product to large quantities of water.
When using automatic feeding devices, always follow manufacturer's directions as to the proper addition of sanitizer product to brominators.
Use only clean and dry utensils.
Do not add this product to any dispensing devices containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion.
Contamination with moisture, organic matter or other chemicals may start a chemical reaction and generate heat, hazardous gas, possible fire and explosion.
In case of contamination or decomposition, do not reseal container.
If possible, isolate container in open air or well ventilated area.
Flood with large volumes of water.
Wash hands thoroughly with soap and water after handling and before eating,

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drinking or using tobacco.
Do not handle until all safety precautions have been read and understood.
Do not contaminate water, food or feed by storage or disposal or cleaning of equipment.

Storage

Requirements for storage areas and containers : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep out of reach of children.
Keep away from animals.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures

Engineering measures : Use with adequate ventilation.
Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye protection : Goggles
Safety glasses with side-shields

Hand protection : Wear rubber gloves.

Respiratory protection : A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Hygiene measures : Wash contaminated clothing before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : tablet

Colour : white

Odour : Faint Halogen.

Safety data

Flash point : not applicable

Oxidizing properties : Oxidizer

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pH	:	4.5 (as aqueous solution), 0.1%, solution
Melting point/range	:	248 - 298 °F (120 - 148 °C) Decomposes
Boiling point/boiling range	:	not applicable
Vapour pressure	:	not applicable
Density	:	0.87 - 0.92 g/cm ³
Water solubility	:	1.5 g/l
Relative vapour density	:	not applicable

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	High temperatures. Poor ventilation. Contamination Moisture/high humidity.
Materials to avoid	:	Avoid contact with water on concentrated material in the container. Avoid contact with easily oxidizable material; ammonia, urea, or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite; other swimming pool/spa chemicals in their concentrated form; alkalis. Avoid contact with all other chemicals.
Hazardous decomposition products	:	<u>Type: Hazardous combustion products</u> Hydrogen halides Bromine Chlorine Carbon oxides nitrogen oxides (NO _x)
Thermal decomposition	:	180 °C (356 °F)
Hazardous reactions	:	Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

<u>Acute oral toxicity</u>	:	LD50 rat Dose: 578 mg/kg
<u>Acute dermal toxicity</u>	:	LD50 rabbit Dose: > 2,000 mg/kg

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- Skin irritation : rabbit
Classification: Corrosive
Result: Primary Irritation Index (PII) = 6.1
Causes skin burns.
Direct contact with wet material or moist skin may cause severe irritation, pain and possibly burns.
- Eye irritation : rabbit
Classification: Corrosive
Causes severe eye damage.
- Sensitisation : Did not cause sensitization on laboratory animals.

SECTION 12. ECOLOGICAL INFORMATION

- Additional ecological information : Toxic to fish.
Toxic to aquatic organisms.
Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

SECTION 13. DISPOSAL CONSIDERATIONS

- Further information : Dispose of waste material in compliance with all federal, state, and local regulations.
Improper disposal of excess product, spray mixture or rinsate is a violation of Federal Law.
If these wastes cannot be disposed of by use according to label instructions, contact your Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. For registered pesticides, contact your State Pesticide Agency.
Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor.
Contact with incompatible materials could cause a reaction or fire.
- Contaminated packaging : Do not re-use empty containers.
Rinse thoroughly before discarding in trash.

SECTION 14. TRANSPORT INFORMATION

DOT UN-Number : 1479

MSDS Number: SPAG_4500034

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Proper shipping name : Oxidizing solid, n.o.s.
Proper technical name : (CONTAINS BROMO-CHLORO-DIMETHYLHYDANTOIN)
Class : 5.1
Packing group : II

IATA UN-Number : 3085
Proper shipping name : Oxidizing solid, corrosive n.o.s.
Proper technical name : (CONTAINS BROMO-CHLORO-DIMETHYLHYDANTOIN)
Class : 5.1 (8)
Packing group : II

IMDG UN-Number : 3085
Proper shipping name : OXIDIZING SOLID, CORROSIVE, N.O.S.
Proper technical name : (CONTAINS BROMO-CHLORO-DIMETHYLHYDANTOIN)
Class : 5.1 (8)
Packing group : II

Not recommended for shipment by air
ORM-D Consumer Commodity exemption possible

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SECTION 15. REGULATORY INFORMATION

National regulatory information

OSHA Hazards : This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SARA Hazard category : Fire Hazard
Acute Health Hazard
Reactivity Hazard

The components of this product are reported in the following inventories:

EINECS	y (positive listing)	On or in compliance with the inventory
TSCA	y (positive listing)	On TSCA Inventory
AICS	y (positive listing)	On or in compliance with the inventory
DSL	y (positive listing)	All components of this product are on the Canadian DSL list.
ENCS	y (positive listing)	On or in compliance with the inventory
KECI	y (positive listing)	On or in compliance with the inventory
PICCS	y (positive listing)	On or in compliance with the inventory
IECSC	y (positive listing)	On or in compliance with the inventory

Additional advice :

FIFRA (Federal Insecticide, Fungicide, Rodenticide Act): This product is a registered pesticide.

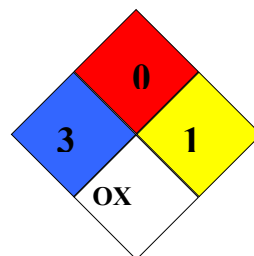
SECTION 16. OTHER INFORMATION

Further information

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Fire Hazard: 0
Reactivity Hazard: 1
Specific hazards: OX Class 2
Oxidizer.



HMS Classification : Health Hazard: 3
Flammability: 0
Reactivity: 1
PPI: Ask supervisor or safety specialist for handling instructions

Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+52 113 711 91 44
	All other countries	+44 (0)208 762 8322
<u>Mexico:</u>		+52 555 004 87 63

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of the seller, it is the user's obligation to determine the conditions of safe use of the products.