

Material Safety Data Sheet

SPAGUARD® BROMINATING TABLETS

Version: 1.2

Revision Date: 03/08/2011

Print Date: 05/31/2012

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: *SPAGUARD® BROMINATING TABLETS*

Product Use Description: Recreational Water Product

Chemical nature: Halogenated hydantoin

Registration number: 5185-420

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

Telephone: (800) 859-7946

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300, 703-527-3887
Poison Control Center (Medical) :: (877) 800-5553
Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

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

Prepared by: Product Safety Department
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03/08/2011

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SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Danger

Form: tablet Colour: white Odour: Faint Halogen.

Hazard Summary :
Corrosive
Oxidizer
Causes serious eye damage.
Causes skin burns.
Harmful if swallowed.
Causes respiratory tract irritation.
Avoid breathing dust or vapor.
Do not get in eyes, on skin, or on clothing.

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OSHA Hazards

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

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 serious eye damage.

Ingestion

: Harmful if swallowed.

Chronic Exposure

: None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component	CAS-No.	Weight percent
1-bromo-3-chloro-5,5-dimethylimidazolidine-2,4-dione	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.

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Eye contact : Call a physician or poison control centre immediately.
: 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 : Remarks: not applicable

Fire fighting

Suitable extinguishing media : Flood with large volumes of water.

Unsuitable extinguishing media : ABC powder
Dry chemical
Risk of violent reaction.

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.

Protective equipment and precautions for firefighters

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.

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,

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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

Handling procedures : 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, 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

Exposure Guidelines

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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 : Note: not applicable

Oxidizing properties : Note: Oxidizer

pH : 4.5
Note: (as aqueous solution), 0.1%, solution

Melting point/range : 248 - 298 °F (120 - 148 °C)
Note: Decomposes

Boiling point/boiling range : Note: not applicable

Vapour pressure : Note: not applicable

Density : 0.87 - 0.92 g/cm³

Water solubility : 1.5 g/l

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Relative vapour density : Note: not applicable

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : Remarks: High temperatures.
Poor ventilation.
Contamination
Moisture/high humidity.

Materials to avoid : Remarks: 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 : Note: Hydrogen halides
Bromine
Chlorine
Carbon oxides
nitrogen oxides (NOx)

Thermal decomposition : 180 °C

Hazardous reactions : Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: 578 mg/kg
Species: rat

Acute dermal toxicity : LD50: > 2,000 mg/kg
Species: rabbit

Skin irritation : Species: rabbit
Result: Primary Irritation Index (PII) = 6.1
Classification: Corrosive
Remarks: Causes skin burns.
Direct contact with wet material or moist skin may cause severe irritation, pain and possibly burns.

Eye irritation : Species: rabbit
Classification: Corrosive
Remarks: Causes serious eye damage.

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Sensitisation : Remarks: Did not cause sensitization on laboratory animals.

12. ECOLOGICAL INFORMATION

Further information on ecology

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
Description of the goods : Oxidizing solid, n.o.s.
(CONTAINS BROMO-CHLORO-DIMETHYLHYDANTOIN)
Class : 5.1
Packing group : III
ERG Code : 140

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IATA

UN number : 3085
Description of the goods : Oxidizing solid, corrosive, n.o.s.
(CONTAINS BROMO-CHLORO-DIMETHYLHYDANTOIN)
Class : 5.1
Packing group : III

IMDG

UN number : 3085
Description of the goods : OXIDIZING SOLID, CORROSIVE, N.O.S.
(CONTAINS BROMO-CHLORO-DIMETHYLHYDANTOIN)
Class : 5.1
Packing group : III
EmS Letter 1 : F-A
EmS Letter 2 : S-Q
Marine pollutant : yes
CONTAINS BROMO-CHLORO-DIMETHYLHYDANTOIN

Not recommended for shipment by air

ORM-D Consumer Commodity exemption possible

Not regulated by DOT and TDG if shipped or transported in packaging less than 400KG
by road and/or rail.

SECTION 15. REGULATORY INFORMATION

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

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Reactivity Hazard

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

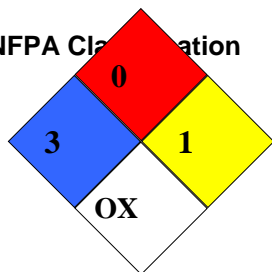
EINECS	On the inventory, or in compliance with the inventory
TSCA	On TSCA Inventory
AICS	On the inventory, or in compliance with the inventory
DSL	All components of this product are on the Canadian DSL list.
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance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

SECTION 16. OTHER INFORMATION

Further information

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

NFPA Classification



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

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

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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.