

Material Safety Data Sheet

BIOGUARD® OFF SEASON HIBERNATE® HIBER® SHOCK

Version: 1.3

Revision Date: 03/28/2014

Print Date: 07/24/2014

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: *BIOGUARD® OFF SEASON HIBERNATE® HIBER® SHOCK*

Product Use Description: Recreational Water Product

Chemical nature: Chlorinated Isocyanurates

Company: Manufacturer
BioLab, Inc.
1725 North Brown Road
Lawrenceville, GA
30043

Supplier
Bio-Lab Canada, Inc.
P.O. Box 245
West Hill, ON
M1E 4Y9

Telephone: 888-645-7946

Emergency telephone number: Poison Control Center (Medical) :: (877) 800-5553
CANUTEC: (24 hours) 613-996-6666 (call collect)
: 1-888-640-7946
Customer Care: 800-998-7946

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

Prepared by Product Safety Department

03/28/2014

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

Form: granules Colour: white Odour: Chlorine

Hazard Summary : Corrosive
Oxidizer
Causes serious eye damage.
Harmful if swallowed.
Harmful if absorbed through skin.
Avoid breathing dust or vapor.
May be harmful if inhaled.
Causes skin irritation.
Do not get in eyes, on skin, or on clothing.

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WHMIS Classification : E: Corrosive Material
C: Oxidizing Material
D2A: Very Toxic Material Causing Other Toxic Effects
D2B: Toxic Material Causing Other Toxic Effects

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 irritation.
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 : This product contains a boron compound. This boron compound when fed to test animals at very high doses, has shown reproductive and developmental toxicity. When this product is used according to label directions, the boron compound in this product does not represent a practical risk to man.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component / CAS-No.	Weight percent
Sodium Dichloro-S-Triazinetrione 2893-78-9	58.2 %
aluminium sulfate 10043-01-3	7 - 13 %
Boron salt Trade Secret	7 - 13 %

Boron Salt HMRIC 7787 Exemption Granted 6/24/2011

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 POISON CENTER or doctor/ physician.

Skin contact : Remove contaminated clothing and shoes.

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- Rinse immediately with plenty of water for at least 30 minutes.
Call a POISON CENTER or doctor/ physician.
- Eye contact : Rinse immediately with plenty of water for at least 30 minutes.
Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Get medical attention immediately.
- Ingestion : Call a physician or poison control centre immediately.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Never give anything by mouth to an unconscious person.

Notes to physician

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

SECTION 5. FIREFIGHTING 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 powder
Risk of violent reaction.
- Further information : When ignited, will burn with the evolution of noxious chlorine containing gases.
Do not let fire burn.

Protective equipment and precautions for firefighters

- Specific hazards during firefighting : Under extreme heat (greater than 400F), this product will evolve noxious chlorine containing gases.
- Special protective equipment for firefighters : 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 : Clean-up methods - large spillage
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

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open to disperse any hazardous gases that may form.

Clean-up methods - small spillage

In case of spills, scoop up and place product in pool or spa water, then flood spilled area with large volumes of water.

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".
- Do not contaminate water, food or feed by storage or disposal or cleaning of equipment.

SECTION 7. HANDLING AND STORAGE

Handling

Handling procedures

- : Avoid contact with skin, eyes and clothing.
- Avoid breathing dust.
- Avoid breathing vapors.
- Contains a strong oxidizing agent.
- Do not mix with other chemicals.
- Mix only with water.
- Never add water to this product.
- Always add product to large quantities of water.
- 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 will start a chemical reaction and generate heat, hazardous gas, possible fire and explosion.
- In case of contamination or decomposition, do not reseal container.
- 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.

Storage

Requirements for storage areas and containers

- : Keep containers tightly closed in a dry, cool and well-ventilated place.
- For bags: Store dry product in its original unopened bag until use. For partially used bags, fold over top of bag and secure with adhesive tape.
- For bottles: Store dry product in original tightly closed container when not in use.
- Keep out of reach of children.
- Keep away from animals.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Components with workplace control parameters

Components / CAS-No.	Value / Basis / Update	Control parameters	Further information
aluminium sulfate 10043-01-3	TWA	2 mg/m3	
Boron salt Trade Secret	TWA	1 mg/m3	

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	CA AB OEL 2009-04-30		
	TWAEV CA QC OEL 2006-12-29	1 mg/m3	
	TWAEV CA ON OEL 2005-12-17	2 mg/m3	
	STEV CA ON OEL 2005-12-17	6 mg/m3	
	TWA CA BC OEL 2011-09-15	2 mg/m3	
	STEL CA BC OEL 2011-09-15	6 mg/m3	
	STEL CA AB OEL 2009-04-30	3 ppm	
	STEL CA AB OEL 2009-04-30	3 mg/m3	

Boron Salt HMRIC 7787 Exemption Granted 6/24/2011

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 : Safety glasses with side-shields

Hand protection : not required under normal use
For prolonged or repeated contact use protective gloves.
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

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respirator's use.

Hygiene measures : Wash contaminated clothing before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : granules

Colour : white

Odour : Chlorine

Safety data

Flash point : Note: not applicable

pH : 5 - 5.5
Note: 1% Solution

Melting point/range : 522 °F (272 °C)

Boiling point/boiling range : Note: not applicable

Vapour pressure : not applicable

Density : 1.0 g/cm³

Water solubility : 250 g/l

Note: no data available

Partition coefficient: n-octanol/water : Note: no data available

Viscosity, kinematic : Note: not applicable

Relative vapour density : Note: no data available

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: Chlorine containing gases can be produced.
nitrogen oxides (NO_x)
Carbon oxides

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Sulphur oxides

Hazardous reactions : Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 Oral: 599 mg/kg
Species: rat

Acute inhalation toxicity
Sodium Dichloro-S-
Triazinetrione : LC50: 0.27 - 1.17 mg/l
Exposure time: 4 h
Species: rat

Boron salt Trade Secret : LC50: 0.27 - 1.17 mg/l

Skin irritation
aluminium sulfate : Result: No skin irritation

Eye irritation
aluminium sulfate : Result: Risk of serious damage to eyes.

Toxicology Assessment

CMR effects : Mutagenicity:
No mutagenic data are available for the product, although aluminum sulfate, a component of this product, has been shown to cause mutagenic effects in the mammalian chromosomal aberration test in human lymphocytes, but is not mutagenic in other in vitro tests. There is no indication that aluminum sulfate is carcinogenic or affects fertility. When this product is used according to label directions, the aluminum sulfate in this product does not present a practical health risk. (EN)

12. ECOLOGICAL INFORMATION

Toxicity to fish
aluminium sulfate : LC50: 37 mg/l
Exposure time: 96 h

Species: Gambusia affinis (Mosquito fish)
static test
LC50: 33.9 mg/l
Exposure time: 96 h

Species: Pimephales promelas (fathead minnow)
flow-through test

Toxicity to daphnia and other aquatic invertebrates
aluminium sulfate : LC50: ca. 6.57 mg/l
Exposure time: 48 h

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Boron salt Trade Secret : > 100 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Toxicity to algae
Boron salt Trade Secret : > 100 mg/l
Exposure time: 72 h
Species: Algae

Bioaccumulation
aluminium sulfate : Remarks:
Bioaccumulation is unlikely.

Further information on ecology

Additional ecological
information : Toxic to fish.
Harmful to aquatic life.
Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : Dispose of waste product or used containers according to local regulations.
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.
Offer rinsed packaging material to local recycling facilities.

SECTION 14. TRANSPORT INFORMATION

TDG

UN number : 3077
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(SODIUM DICHLORO-S-TRIAZINETRIONE)
Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes

IATA

UN number : 3077
Description of the goods : Environmentally hazardous substance, solid, n.o.s.
(SODIUM DICHLORO-S-TRIAZINETRIONE)
Class : 9
Packing group : III
Labels : 9

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Environmentally hazardous : yes

IMDG

UN number : 3077
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
(SODIUM DICHLORO-S-TRIAZINETRIONE)

Class : 9
Packing group : III
EmS Number 1 : F-A
EmS Number 2 : S-F

Marine pollutant : yes
SODIUM DICHLORO-S-TRIAZINETRIONE

Environmentally hazardous : yes
SODIUM DICHLORO-S-TRIAZINETRIONE

Not recommended for shipment by air

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

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : E
C
D2A
D2B

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

US.TSCA On TSCA Inventory

DSL All components of this product are on the Canadian DSL list.

AICS On the inventory, or in compliance with the inventory

NZIoC On the inventory, or in compliance with the inventory

ENCS On the inventory, or in compliance with the inventory

ISHL 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

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TSCA list Information

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
ZUS T12B

Not relevant

SECTION 16. OTHER INFORMATION

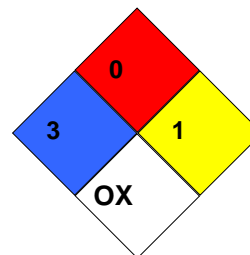
Further information

HMIS Classification

: Health hazard: 3
Flammability: 0
Physical hazards: 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 1
Oxidizer.



Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 555 004 8763

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.