

Material Safety Data Sheet

BIOGUARD® MINERAL SPRINGS® RENEWAL

Version: 1.1

Revision Date: 01/01/2014

Print Date: 03/05/2014

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: *BIOGUARD® MINERAL SPRINGS® RENEWAL*

Product Use Description: Recreational Water Product

Chemical nature: Preparation

Registration number: 5185-50035

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
Customer Care: 800-998-7946

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

Prepared by Product Safety Department

01/01/2014

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

Form: granules Colour: white Odour: Floral Mint.

Hazard Summary : Causes eye irritation.
Causes skin irritation.
Eye burns may occur.
May cause burns or external ulcers.
May be harmful if swallowed.
May cause irritation of respiratory tract.
Do not get in eyes, on skin, or on clothing.
Avoid breathing vapors.

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

Potential Health Effects

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- Primary Routes of Entry : Inhalation
Eye contact
Skin contact
Ingestion
- Inhalation : May cause irritation of respiratory tract.
- Skin : Causes skin irritation.
May cause burns or external ulcers.
- Eyes : Causes eye irritation.
Eye burns may occur.
- Ingestion : May be 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 hydrogensulphate 7681-38-1	15 - 35 %
boric acid 10043-35-3	2 - 13 %
sodium sulphate 7757-82-6	< 5 %
aluminium sulfate 10043-01-3	1 - 7 %
Phosphonic acid, reaction products with maleic anhydride, sodium salts 180513-31-9	0.1 - 3 %
cyanuric acid (Dust) 108-80-5	0.1 - 3 %

SECTION 4. FIRST AID MEASURES

First aid procedures

- Inhalation : Remove to fresh air.
Give oxygen or artificial respiration if needed.
Call a POISON CENTER or doctor/ physician.
- Skin contact : Remove contaminated clothing and shoes.
Rinse immediately with plenty of water for at least 15 minutes.
Call a POISON CENTER or doctor/ physician.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

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Ingestion : Call a POISON CENTER or doctor/ physician.
: Call a physician or poison control centre immediately.
Do not induce vomiting unless told to do so by the poison control center or doctor.
Have person sip a glass of water if able to swallow.
Never give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

Flammable properties

Flash point : Remarks: not applicable

Fire fighting

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : There are no unusual fire and explosion hazards known.

Protective equipment and precautions for firefighters

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 : Using appropriate protective clothing and safety equipment, contain 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.

Additional advice : Treat recovered material as described in the section "Disposal considerations".

SECTION 7. HANDLING AND STORAGE

Handling

Handling procedures : Avoid contact with skin, eyes and clothing.
Avoid breathing dust.
Do not mix with other chemicals.
Mix only with 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

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Requirements for storage areas and containers : Store in original container.
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.
Keep 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

Components with workplace control parameters

Components / CAS-No.	Value / Basis / Update	Control parameters	Further information
boric acid 10043-35-3	TWA ACGIH 2007-01-01	2 mg/m3	
	STEL ACGIH 2007-01-01	6 mg/m3	
	TWA ACGIH 2008-01-01	2 mg/m3	
	STEL ACGIH 2008-01-01	6 mg/m3	
aluminium sulfate 10043-01-3	TWA NIOSH REL 2005-09-01	2 mg/m3	
cyanuric acid (Dust) 108-80-5	TWA US WEEL 2008-01-01	10 mg/m3	
	TWA US WEEL 2008-01-01	5 mg/m3	

Engineering measures

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

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Personal protective equipment

- Eye protection : Safety glasses with side-shields
- Hand protection : Wear rubber gloves.
- Respiratory protection : No personal respiratory protective equipment normally required.
If product is used in an area with poor ventilation and mist or vapor is expected, a respirator that meets OSHA/ANSI standards may be required.
- Hygiene measures : Remove and wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Form : granules
- Colour : white
- Odour : Floral Mint.

Safety data

- Flash point : Note: not applicable
- pH : 2 - 2.5
Note: 1% Solution
- Melting point/range : Note: no data available
- Vapour pressure : no data available
- Water solubility : Note: soluble
- 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: Moisture/high humidity.
Poor ventilation.
High temperatures.
Contamination
- Materials to avoid : Remarks: Do not mix with other swimming pool/spa chemicals in their concentrated forms.
Oxidizing agents
Strong mineral acids
- Hazardous reactions : Hazardous polymerisation does not occur.

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SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity
boric acid : LD50: 3,500 - 4,100 mg/kg
Species: rat

sodium sulphate : LD50: 2,610 mg/kg
Species: rat

aluminium sulfate : LD50: > 5,000 mg/kg
Species: rat

cyanuric acid (Dust) : LD50: > 5,000 mg/kg
Species: rat

Acute inhalation toxicity
boric acid : LC50: > 2.0 mg/l
Species: rat

sodium sulphate : LC50: > 5.5 mg/l
Species: rat

cyanuric acid (Dust) : > 612 mg/m³
Species: rat

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

cyanuric acid (Dust) : LD50: > 5,000 mg/kg
Species: rabbit

Skin irritation : Remarks: Irritating to skin.
May cause burns or external ulcers.

Eye irritation : Remarks: Irritating to eyes.
Eye burns may occur.

Sensitisation : Remarks: Repeated or prolonged skin contact may cause allergic
reactions with susceptible persons.

Reproductive toxicity
cyanuric acid (Dust) : Species: rat
Application Route: Oral

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

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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
sodium sulphate

: LC50: 315 mg/l
Exposure time: 96 h

Species: 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

cyanuric acid (Dust)

Species: Pimephales promelas (fathead minnow)
flow-through test
: LC50: > 100 mg/l
Exposure time: 96 h

Species: Oryzias latipes (Orange-red killifish)
static test Analytical monitoring: yes
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

aluminium sulfate : LC50: ca. 6.57 mg/l
Exposure time: 48 h

cyanuric acid (Dust)

: EC50: 1,000 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Immobilization Analytical monitoring: yes
Method: OECD Test Guideline 202

Toxicity to algae

cyanuric acid (Dust) : EC50: 620 mg/l
Exposure time: 72 h
Species: Algae
Analytical monitoring: yes
Method: OECD Test Guideline 201

Toxicity to bacteria
sodium sulphate

: 770 mg/l
Exposure time: 17 h
Species: Bacteria

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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
cyanuric acid (Dust) : NOEC: 32 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

Bioaccumulation
sodium sulphate : Bioconcentration factor (BCF): 0.5
Remarks:
Bioaccumulation is unlikely.

aluminium sulfate : Remarks:
Bioaccumulation is unlikely.

cyanuric acid (Dust) : Species: Cyprinus carpio (Carp)
Exposure time: 42 d
Temperature: 25 °C
Bioconcentration factor (BCF): < 0.5

Biodegradability
cyanuric acid (Dust) : aerobic
Result: According to the results of tests of biodegradability this product is not readily biodegradable.
0 %

Further information on ecology

Results of PBT assessment
sodium hydrogensulphate : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

Additional ecological information : Avoid release to the environment.
May be toxic to fish.
May be toxic to aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : Dispose of waste material in compliance with all federal, state, and local regulations.

Contaminated packaging : Do not re-use empty containers.
Rinse thoroughly before discarding in trash.

SECTION 14. TRANSPORT INFORMATION

DOT

UN number : 1759
Description of the goods : Corrosive solids, n.o.s.
(CONTAINS SODIUM BISULFATE)
Class : 8
Packing group : II
ERG Code : 154

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IATA

UN number : 1759
Description of the goods : Corrosive solid, n.o.s.
(CONTAINS SODIUM BISULFATE)
Class : 8
Packing group : II
Labels : 8
Environmentally hazardous : no

IMDG

UN number : 1759
Description of the goods : CORROSIVE SOLID, N.O.S.
(CONTAINS SODIUM BISULFATE)
Class : 8
Packing group : II
EmS Number 1 : F-A
EmS Number 2 : S-B

Marine pollutant : no
Environmentally hazardous : no

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

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 : Acute Health Hazard

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

TSCA

DSL This product contains one or several components that are not on the Canadian DSL nor NDSL lists.

AICS Not in compliance with the inventory

NZIoC Not in compliance with the inventory

ENCS Not in compliance with the inventory

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KECI Not in compliance with the inventory

PICCS Not in compliance with the inventory

IECSC Not in compliance with the inventory

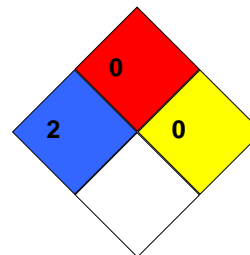
TSCA list Information US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
ZUS T12B
Not relevant

SECTION 16. OTHER INFORMATION

Further information

HMIS Classification : Health hazard: 2
Flammability: 0
Physical hazards: 0

NFPA Classification : Health hazard: 2
Fire Hazard: 0
Reactivity Hazard: 0



Other Emergency Phone Number

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

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Mexico:		+52 555 004 8763
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