

Material Safety Data Sheet

BIOGUARD® LO'N SLO®

Version: 1.0

Revision Date: 07/30/2010

Print Date: 12/26/2014

Potential Health Effects

- Primary Routes of Entry : Eye contact
Skin contact
Inhalation
Ingestion
- Inhalation : May cause respiratory tract irritation.
- Skin : Causes skin burns.
- Eyes : Causes eye burns.
- Ingestion : Harmful if swallowed.
- Chronic Exposure : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component	CAS-No.	Weight percent
sodium hydrogensulphate	7681-38-1	90 - 95 %
sodium sulphate	7757-82-6	4 - 10 %

SECTION 4. FIRST AID MEASURES

First aid procedures

- Inhalation : Remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes.
Get medical attention if irritation develops and persists.
- 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.
Get medical attention.
- Ingestion : If swallowed, DO NOT induce vomiting.
Drink 1 or 2 glasses of water.
Get medical attention immediately.

Notes to physician

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Treatment : Eyes: Natural watering of eyes will dissolve sodium bisulfate, forming a weak sulfuric acid solution which may cause burns.
Flush with plenty of water.
Do not use chemical antidotes or neutralizing solutions.
Skin: Mild burns may occur if not thoroughly flushed previously.
Inhalation: Mild burning sensations may occur to mucous membranes and upper respiratory tract.
Ingestion: Body water content will react with sodium bisulfate to form a weak sulfuric acid solution, which may burn tissues in mouth, esophagus or stomach.
Solution should be diluted to reduce burning effect.

SECTION 5. FIRE-FIGHTING 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.
Water
Dry chemical

Unsuitable extinguishing media : Avoid water contact to material if possible as contact with water forms sulfuric acid solution. Precautions for exposure to sulfuric acid should be followed.

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.
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

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Handling procedures : Avoid contact with skin, eyes and clothing.
Avoid breathing dust.
Mix only with water.
Never add water to this product.
Always add product to large quantities of water.
Do not mix with other chemicals.
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.
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 : Store in original container.
Keep tightly closed in a dry, cool and well-ventilated place.
Keep out of reach of children.
Keep away from animals.

Other data : Stable under normal conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Engineering measures

Engineering measures : Use only with adequate ventilation.
Local exhaust
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 : 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 : Remove and wash contaminated clothing before re-use.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : granules
Colour : off-white
Odour : Sulfate

Safety data

Flash point : Note: not applicable
pH : < 1
Note: 5% Solution
Freezing point : Note: Not Available
Melting point/range : 350.01 °F (176.67 °C)
Boiling point/boiling range : Note: not applicable
Vapour pressure : Note: Not Available
Density : 1.3 g/cm3
Water solubility : 1,080 g/l
at 68 °F (20 °C)
Note: completely soluble
Relative vapour density : Note: Not Available
Evaporation rate : Note: not applicable

SECTION 10. STABILITY AND REACTIVITY

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

Materials to avoid : Remarks: Do not mix with other chemicals.
Chlorine bleach
Ammonia
alkalines
Do not mix with other swimming pool/spa chemicals in their concentrated forms.

Hazardous decomposition products : Note: Heating or fire can release toxic gas.
Sulphur oxides

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Hazardous reactions : Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: 2,800 mg/kg
Species: rat

Acute inhalation toxicity
sodium sulphate : LC50: > 5.5 mg/l
Species: rat

Skin irritation : Remarks: Moderate irritant.
May cause burns or external ulcers.

Eye irritation : Remarks: Mild to severe irritant.
May cause burns or external ulcers.

Sensitisation : Remarks: This product is not expected to be a skin sensitizer.

Further information
sodium hydrogensulphate : There is no data available for this product.

12. ECOLOGICAL INFORMATION

Toxicity to fish
sodium sulphate : LC50: 315 mg/l
Exposure time: 96 h

Species: Fish

Toxicity to bacteria
sodium sulphate : 770 mg/l
Exposure time: 17 h
Species: Bacteria

Further information on ecology

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

Additional ecological : May be toxic to fish.

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information

May be toxic to aquatic organisms.
Do not allow material to contaminate ground water system.
Do not flush into surface water or sanitary sewer system.

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

Not dangerous goods

TDG

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

RID

Not dangerous goods

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:

EINECS On the inventory, or in compliance with the inventory

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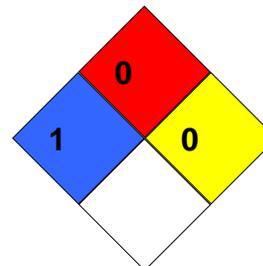
TSCA	On TSCA Inventory
AICS	On the inventory, or in compliance with the inventory
DSL	All components of this product are on the Canadian DSL list.
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance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

SECTION 16. OTHER INFORMATION

Further information

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

NFPA Classification : Health hazard: 1
Fire Hazard: 0
Reactivity Hazard: 0



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

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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.