

# SAFETY DATA SHEET

Revision Date 26-Mar-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** BioGuard Maintain Smart Shock

### Other means of identification

**Product Code** 22947BIO

**UN/ID no.** UN1759

### Recommended use of the chemical and restrictions on use

**Recommended Use** Swimming Pool Product.

**Uses advised against** Do not mix with other chemicals

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Bio-Lab, Inc.  
P.O. Box 300002  
Lawrenceville, GA 30049-1002  
Telephone 800-859-7946

### Emergency telephone number

**Emergency Telephone** Chemtrec (Transportation) 1-800-424-9300, 703-527-3887  
Poison Control Center (Medical) : (877) 800-5553

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Causes severe skin burns and eye damage  
Suspected of damaging fertility or the unborn child  
May cause respiratory irritation  
Harmful if swallowed  
Harmful in contact with skin



**Color** blue**Physical state** Solid**Odor** Chlorine**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 Wash contaminated clothing before reuse  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information****3. COMPOSITION/INFORMATION ON INGREDIENTS****Mixture**

Chemical Name	CAS No.	Weight-%
Sodium Dichloro-S-Triazinetrione	2893-78-9	63.05
Boron sodium oxide (B <sub>4</sub> Na <sub>2</sub> O <sub>7</sub> ), pentahydrate	12179-04-3	3 - 5*
Trade Secret	Proprietary	3 - 5*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures****General advice**

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

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	continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. If symptoms persist, call a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty of water. Call a physician immediately.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.
<b><u>Most important symptoms and effects, both acute and delayed</u></b>	
<b>Symptoms</b>	No information available.
<b><u>Indication of any immediate medical attention and special treatment needed</u></b>	
<b>Note to physicians</b>	Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

## 5. FIRE-FIGHTING MEASURES

### **Suitable extinguishing media**

Flood fire area with water from a distance.

**Unsuitable extinguishing media** Do not use dry chemicals, carbon dioxide, or halogenated extinguishing agents.

### **Specific hazards arising from the chemical**

Do not let the fire burn. Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Wet material may generate nitrogen trichloride, an explosion hazard.

#### **Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### **Protective equipment and precautions for firefighters**

In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes.

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

### **Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. 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.

#### Methods for cleaning up

Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Do not use floor sweeping compounds to clean up spills. Do not transport wet or damp material. Contact supplier in Section 1 for instructions, especially for damp or contaminated material.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

##### Advice on safe handling

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. Wash thoroughly after handling. Use only in well-ventilated areas. Do not mix with other chemicals.

#### Conditions for safe storage, including any incompatibilities

##### Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Protect from moisture.

##### Incompatible materials

Incompatible with strong acids and bases. Ammonia. Calcium hypochlorite. Combustible material. Do not mix with other swimming pool/spa chemicals in their concentrated forms. Reducing agent.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

##### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Boron sodium oxide (B <sub>4</sub> Na <sub>2</sub> O <sub>7</sub> ), pentahydrate 12179-04-3	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> inhalable fraction	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>
Trade Secret	-	(vacated) TWA: 2 mg/m <sup>3</sup> Al Aluminum	TWA: 2 mg/m <sup>3</sup> Al

NIOSH IDLH *Immediately Dangerous to Life or Health*

##### Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

##### Engineering Controls

Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear safety glasses with side shields (or goggles).

##### Skin and body protection

Wear protective gloves and protective clothing.

##### Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**General Hygiene Considerations** When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid	<b>Odor</b>	Chlorine
<b>Appearance</b>	granules	<b>Odor threshold</b>	No information available
<b>Color</b>	blue		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	4.6 - 4.8	in 1% Solution
<b>Melting point/freezing point</b>	272 °C / 522 °F	Decomposes on heating
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	No information available	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific Gravity</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Density</b>	1.02 - 1.04	g/cm3
<b>Bulk density</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

### Other Information

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under normal conditions

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Extremes of temperature and direct sunlight. Protect from moisture. Do not mix with other chemicals.

### Incompatible materials

Incompatible with strong acids and bases. Ammonia. Calcium hypochlorite. Combustible material. Do not mix with other swimming pool/spa chemicals in their concentrated forms. Reducing agent.

### Hazardous Decomposition Products

Chlorine gas.

## 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

<b>Inhalation</b>	Irritating to respiratory system.
<b>Eye contact</b>	Severely irritating to eyes. Risk of serious damage to eyes. Causes burns.
<b>Skin contact</b>	Irritating to skin. Contact with moist skin may cause skin burns. Harmful in contact with skin.
<b>Ingestion</b>	Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Dichloro-S-Triazinetrione 2893-78-9	= 735 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 50 mg/L ( Rat ) 1 h
Boron sodium oxide (B4Na2O7), pentahydrate 12179-04-3	= 2403 mg/kg ( Rat )	-	-
Trade Secret	= 1930 mg/kg ( Rat )	-	-

Information on toxicological effects

**Symptoms** No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** 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 humans.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Chronic toxicity** No information available.

**Target Organ Effects** Eyes, Respiratory system, Skin.

**Aspiration hazard** No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (inhalation-dust/mist)** 19.8 mg/l

**Oral LD50** 581 mg/kg (rat)

**Dermal LD50** > 2000 mg/kg

**12. ECOLOGICAL INFORMATION**Ecotoxicity

Very toxic to aquatic life with long lasting effects

4.73% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium Dichloro-S-Triazinetrione 2893-78-9	-	0.25 - 1: 96 h Lepomis macrochirus mg/L LC50 static 0.207 - 0.389: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.176 - 0.267: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.29: 96 h Oncorhynchus mykiss mg/L LC50 0.13 - 0.36: 96 h Oncorhynchus mykiss mg/L LC50 static	0.00018 - 0.00021: 48 h Daphnia magna mg/L EC50 0.093 - 0.16: 48 h Daphnia magna mg/L EC50

Trade Secret	-	100: 96 h Carassius auratus mg/L LC50 37: 96 h Gambusia affinis mg/L LC50 static	136: 15 min Daphnia magna mg/L EC50
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**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container. Refer to all federal, state and local regulations prior to disposal of container and unused contents by reuse, recycle or disposal.

### 14. TRANSPORT INFORMATION

**Note:**

Limited quantity (LQ) exception is possible Limited quantity (LQ) exception is possible

**DOT**

<b>UN/ID no.</b>	UN1759
<b>Proper shipping name</b>	Corrosive solids, n.o.s. (Sodium dichloro-s-triazinetrione, Copper Compounds)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Description</b>	UN1759, Corrosive solids, n.o.s. (Sodium dichloro-s-triazinetrione, Copper Compounds), 8, III
<b>Emergency Response Guide Number</b>	154

**IATA**

<b>UN/ID no.</b>	UN1759
<b>Proper shipping name</b>	Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetrione, Copper Compounds)
<b>Hazard Class</b>	8
<b>Subsidiary hazard class</b>	III
<b>Description</b>	UN1759, Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetrione, Copper Compounds), 8, III

**IMDG**

<b>UN/ID no.</b>	UN1759
<b>Proper shipping name</b>	Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetrione, Copper Compounds)
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>EmS-No.</b>	F-A, S-B
<b>Description</b>	UN1759, Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetrione, Copper Compounds), 8, III
<b>Marine pollutant</b>	This material meets the definition of a marine pollutant

## 15. REGULATORY INFORMATION

### International Inventories

TSCA Complies  
DSL/NDSL Complies

### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Trade Secret	5000 lb	-	-	X

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Trade Secret	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

#### **U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium Dichloro-S-Triazinetrione 2893-78-9	X	-	X
Boron sodium oxide (B <sub>4</sub> Na <sub>2</sub> O <sub>7</sub> ), pentahydrate 12179-04-3	-	X	-
Trade Secret	X	X	X

#### **U.S. EPA Label Information**

**EPA Pesticide Registration Number** 5185-493

#### **EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the



pesticide label:

**Difference between SDS and EPA Pesticide label**

DANGER: Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed. Harmful if absorbed through skin. Do not breathe dust or fumes. Irritating to nose and throat. Do not get in eyes, on skin or clothing. Wear goggles, protective clothing and rubber gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<u><b>NFPA</b></u>	Health hazards 3	Flammability 0	Instability 1	Physical and Chemical Properties -
<u><b>HMIS</b></u>	Health hazards 3	Flammability 0	Physical hazards 1	Personal protection X

<b>Prepared By</b>	Regulatory Affairs
<b>Revision Date</b>	26-Mar-2015
<b>Revision Note</b>	No information available
<b>Disclaimer</b>	

The information provided in this Material 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.

**End of Safety Data Sheet**