SAFETY DATA SHEET

Version 1

Revision Date 26-Mar-2015

1. IDENTIFICATION

| Product identifier | | | | |
|---|--|---|--|--|
| Product Name | BIOGUARD SALTSCAPES PH REDUCER | | | |
| Other means of identification Product Code | 16018BIO | | | |
| Recommended use of the chemi Recommended Use Uses advised against | <u>cal and restrictions on use</u> Swimming pool chemicals. Do not mix with other chemicals | | | |
| Details of the supplier of the safe Supplier Address Bio-Lab, Inc. P.O. Box 300002 Lawrenceville, GA 30049-1002 Telephone 800-859-7946 | ety data sheet | | | |
| 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 | 2. HAZARDO IDENTIFICATION | | | |
| OSHA Regulatory Status This chemical is considered hazard | dous by the 2012 OSHA Hazard Communication Standard (29 CFR | - | | |
| OSHA Regulatory Status | | - | | |
| OSHA Regulatory Status This chemical is considered hazard | dous by the 2012 OSHA Hazard Communication Standard (29 CFR | - | | |
| OSHA Regulatory Status This chemical is considered hazard Serious eye damage/eye irritation | dous by the 2012 OSHA Hazard Communication Standard (29 CFR | - | | |
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| OSHA Regulatory Status This chemical is considered hazard Serious eye damage/eye irritation Label elements | dous by the 2012 OSHA Hazard Communication Standard (29 CFR | - | | |

Wear protective gloves/protective clothing/eye protection/face protection

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

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

1% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

| Chemical Name | CAS No. | Weight-% |
|-------------------------|-----------|----------|
| sodium hydrogensulphate | 7681-38-1 | 93.2 |
| sodium sulphate | 7757-82-6 | 6.8 |

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

4. FIRST AID MEASURES

Description of first aid measures

| General advice | Immediate medical attention is required. | |
|------------------------------------|--|--|
| Eye contact | Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Call a physician immediately. | |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. | |
| Inhalation | Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. | |
| Ingestion | Immediate medical attention is required. 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 or poison control center immediately. | |
| Self-protection of the first aider | Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. | |
| Most important symptoms and effe | ects, both acute and delayed | |
| Symptoms | No information available. | |
| Indication of any immediate medica | al attention and special treatment needed | |
| Note to physicians | Treat symptomatically. Eyes: Natural watering of eyes will dissolve sodium bisulfate, forming a weak sulfuric acid solution which may cause burns. 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. | |
| | | |

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Explosion data Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak. Avoid creating dust.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. 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 containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upTake up mechanically, placing in appropriate containers for disposal. Clean contaminated
surface thoroughly. Use personal protective equipment as required. Cover powder spill with
plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. Dam
up. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

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 dry, cool and well-ventilated place. Keep in properly labeled containers. |
|------------------------|--|
| Incompatible materials | Incompatible with strong acids and bases. Incompatible with oxidizing agents. Ammonia. Chlorine bleach. Do not mix with other swimming pool/spa chemicals in their concentrated forms. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

| Engineering Controls | Showers Eyewash stations Ventilation systems. |
|------------------------------------|--|
| Individual protection measures, su | ich 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. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and weak it for a work black and an even whether grade and provide a state of the state of the state. |

9. PHYSICAL AND CHEMICAL PROPERTIES

and wash it before reuse. Wear suitable gloves and eye/face protection.

Information on basic physical and chemical properties

| Physical state | Solid | | |
|-------------------------------|--------------------------|------------------|--------------------------|
| Appearance | granules | Odor | Sulphurous |
| Color | off-white | Odor threshold | No information available |
| | | | |
| Property | Values | Remarks • Method | |
| рН | <1 | 5% solution | |
| Melting point/freezing point | 350 °C | | |
| Boiling point / boiling range | No information available | | |
| Flash point | No information available | | |
| Evaporation rate | No information available | | |
| Flammability (solid, gas) | No information available | | |
| Flammability Limit in Air | | | |
| Upper flammability limit: | No information available | | |
| Lower flammability limit: | No information available | | |
| Vapor pressure | No information available | | |
| Vapor density | No information available | | |
| Specific Gravity | No information available | | |
| Water solubility | completely soluble | | |
| Solubility in other solvents | No information available | | |
| Partition coefficient | No information available | | |
| Autoignition temperature | No information available | | |
| Decomposition temperature | No information available | | |
| Kinematic viscosity | No information available | | |
| Dynamic viscosity | No information available | | |
| Density | 1.3 | g/cm3 | |
| Bulk density | No information available | | |
| Explosive properties | No information available | | |
| Oxidizing properties | No information available | | |
| Other Information | | | |
| Softening point | No information available | | |
| Molecular weight | No information available | | |
| VOC Content (%) | No information available | | |

10. STABILITY AND REACTIVITY

 Reactivity

 No data available

 Chemical stability

 Stable under recommended storage conditions.

 Possibility of Hazardous Reactions

 None under normal processing.

 Conditions to avoid

 Exposure to air or moisture over prolonged periods.

 Incompatible materials

 Incompatible with strong acids and bases. Incompatible with oxidizing agents. Ammonia. Chlorine bleach. Do not mix with other swimming pool/spa chemicals in their concentrated forms.

 Hazardous Decomposition Products

 Thermed decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Sulphur oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| May cause irritation. |
|---|
| Irritating to eyes. Risk of serious damage to eyes. |
| Causes skin irritation. Contact with moist skin may cause skin burns. |
| Harmful if swallowed. Can burn mouth, throat, and stomach. |
| |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------------|---------------------|-------------|-----------------|
| sodium hydrogensulphate 7681-38-1 | = 2490 mg/kg (Rat) | - | - |
| sodium sulphate 7757-82-6 | > 10000 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 sensitization responses were observed. |
|--------------------------|---|
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Chronic toxicity | No known effect. |
| Aspiration hazard | No information available. |

Numerical measures of toxicity - Product Information

| ATEmix (oral) | 3080.3 mg/kg |
|---------------|--------------|
| Oral LD50 | 2800 mg/kg |

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|-------------------------|----------------------|------|------------------------------|
| sodium hydrogensulphate | - | - | 190: 48 h Daphnia magna mg/L |

| 7681-38-1 | | | EC50 |
|-----------------|---|----------------------------------|-------------------------------|
| sodium sulphate | - | 13500 - 14500: 96 h Pimephales | 2564: 48 h Daphnia magna mg/L |
| 7757-82-6 | | promelas mg/L LC50 6800: 96 h | EC50 630: 96 h Daphnia magna |
| | | Pimephales promelas mg/L LC50 | mg/L EC50 |
| | | static 3040 - 4380: 96 h Lepomis | - |
| | | macrochirus mg/L LC50 static | |
| | | 13500: 96 h Lepomis macrochirus | |
| | | mg/L LC50 | |

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

| DOT | Not regulated |
|-------|---------------|
| TDG | Not regulated |
| IATA | Not regulated |
| IMDG_ | Not regulated |

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |

mplies

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

<u>SARA 313</u>

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 does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

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 sulphate | - | Х | Х |
| 7757-82-6 | | | |

U.S. EPA Label Information

EPA Pesticide Registration Number This product does not contain any substances regulated as pesticides Difference between SDS and CPSC label

This product is regulated under Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act (16 CFR Part 1500). These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace product labels.

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

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

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

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