SAFETY DATA SHEET

Revision Date 26-Mar-2015

1. IDENTIFICATION

Product identifier	
Product Name	BIOGUARD SALTSCAPES CHLORINE FREE SHOCK OXIDIZER
Other means of identification	
Product Code	16010BIO
UN/ID no.	UN3260
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
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

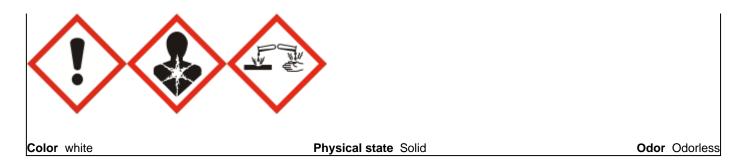
Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction May cause respiratory irritation Harmful if swallowed Harmful in contact with skin Version 1



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection Use only outdoors or in a well-ventilated area Do not breathe dust/fume/gas/mist/vapors/spray In case of inadequate ventilation wear respiratory protection Contaminated work clothing should not be allowed out of the workplace

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 skin irritation or rash occurs: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Immediately call a POISON CENTER or doctor/physician 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 Keep out of reach of children

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

45% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS No.	Weight-%
potassium hydrogenperoxomonosulphate	10058-23-8	43
potassium sulfate	7778-80-5	29
potassium hydrogensulphate	7646-93-7	23
dipotassium peroxodisulphate (Dust)	7727-21-1	3
magnesium carbonate	546-93-0	2

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 continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician.		
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is not required. If skin irritation persists, call a physician.		
Inhalation	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. Oxygen or artificial respiration if needed. If symptoms persist, call a physician.		
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.		
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 medical attention and special treatment needed			
Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.		
5. FIRE-FIGHTING MEASURES			

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Suitable extinguishing media Water.

Unsuitable extinguishing media

Do not use carbon dioxide or other gas-filled fire extinguishers; they will have no effect on decomposing persulfates.

Specific hazards arising from the chemical

Will release oxygen when heated, intensifying a fire. Acidic mist may be present; self contained breathing apparatus should be

used. In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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 Avoid contact with skin, eves or clothing. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Environmental precautions Do not allow into any sewer, on the ground or into any body of water. Should not be **Environmental precautions** released into the environment. 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. Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp Methods for cleaning up 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.

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. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Wash contaminated clothing before reuse. Do not mix with other chemicals. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities

Storage ConditionsKeep 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.Incompatible materialsStrong acids. Do not mix with other swimming pool/spa chemicals in their concentrated
forms. Avoid contact with water on concentrated material in the container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
dipotassium peroxodisulphate	TWA: 0.1 mg/m ³ Persulfate	-	-

(Dust) 7727-21-1			
magnesium carbonate	-	TWA: 15 mg/m ³ total dust	TWA: 10 mg/m ³ total dust
546-93-0		TWA: 5 mg/m ³ respirable fraction	TWA: 5 mg/m ³ respirable dust

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 Minimize exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid		
Appearance	dry, free flowing granules	Odor	Odorless
Color	white	Odor threshold	No information available
Property_	Values	Remarks • Method	
рН	2.3	in 1% Solution	
Melting point/freezing point	No information available		
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	Soluble in water		
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	1.1 - 1.4	g/cm3	
Bulk density	No information available		
Explosive properties	No information available		

Oxidizing properties

No information available

Other Information

Softening point Molecular weight VOC Content (%) No information available No information available No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available <u>Chemical stability</u> Stable under recommended storage conditions. <u>Possibility of Hazardous Reactions</u> None under normal processing. <u>Conditions to avoid</u> Extremes of temperature and direct sunlight. Protect from moisture. <u>Incompatible materials</u> Strong acids. Do not mix with other swimming pool/spa chemicals in their concentrated forms. Avoid contact with water on concentrated material in the container. <u>Hazardous Decomposition Products</u>

Carbon dioxide (CO2). Oxygen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	May cause irritation of respiratory tract.
Eye contact	Risk of serious damage to eyes. Causes burns.
Skin contact	Causes burns. Harmful in contact with skin.
Ingestion	Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
potassium sulfate 7778-80-5	= 6600 mg/kg (Rat)	-	-
potassium hydrogensulphate 7646-93-7	= 2340 mg/kg (Rat)	-	-
dipotassium peroxodisulphate (Dust) 7727-21-1	= 802 mg/kg(Rat)	> 10000 mg/kg (Rabbit)	-

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 STOT - single exposure STOT - repeated exposure Chronic toxicity	No information available. No information available. No information available. Avoid repeated exposure. Repeated contact may cause allergic reactions in very susceptible persons.
Target Organ Effects	Eyes, Respiratory system, Skin.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Oral LD50 Dermal LD50 Inhalation LC50 500 mg/kg (rat) > 2000 mg/kg (rat) > 5 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

71% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
potassium sulfate 7778-80-5	2900: 72 h Desmodesmus subspicatus mg/L EC50	653: 96 h Lepomis macrochirus mg/L LC50 3550: 96 h Lepomis macrochirus mg/L LC50 static 510 - 880: 96 h Pimephales promelas mg/L LC50 static	890: 48 h Daphnia magna mg/L EC50

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		
DOT UN/ID no. Proper shipping name Hazard Class Packing Group Description Emergency Response Guide Number	UN3260 Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound) 8 II UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound), 8, II 154		
IATA			

UN/ID no.	UN3260
Proper shipping name	Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound)
Hazard Class	8
Packing Group	ll

UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound), 8, II
UN3260
Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound)
8
I
F-A, S-B
UN3260, Corrosive solid, acidic, inorganic, n.o.s. (Monopersulfate compound), 8, II
No

15. REGULATORY INFORMATION

International Inventories TSCA DSL/NDSL

Complies 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

<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	Yes
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
potassium hydrogensulphate 7646-93-7	Х	-	-
dipotassium peroxodisulphate (Dust) 7727-21-1	Х	X	Х
magnesium carbonate 546-93-0	Х	X	-

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 1	Physical and Chemical Properties -
HMIS	Health hazards 3*	Flammability 0	Physical hazards 1	Personal protection X
Prepared By	Regulator	y Affairs		

 Revision Date
 26-Mar-2015

 Revision Note
 No information available

 Disclaimer
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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