SAFETY DATA SHEET

Version 1

Revision Date 26-Mar-2015

1. IDENTIFICATION

<u>Product identifier</u> Product Name	BIOGUARD REMEDY SPOT KILL WP
Other means of identification Product Code UN/ID no.	23112BIO UN2468
Recommended use of the chemical Recommended Use Uses advised against	<u>and restrictions on use</u> Swimming Pool Product. Do not mix with other chemicals
Details of the supplier of the safety Supplier Address Bio-Lab, Inc. P.O. Box 300002 Lawrenceville, GA 30049-1002	data sheet_
Telephone 800-859-7946 Emergency telephone number Emergency Telephone	Chemtrec (Transportation) 1-800-424-93

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 - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Oxidizing solids	Category 2

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed Causes severe skin burns and eye damage May cause respiratory irritation Fatal if inhaled ** May intensify fire; oxidizer



Color white

Physical state Solid

Odor Chlorine

** Product as sold is not expected to produce respiratory effects. See Section 11 (Toxicological Information) for additional details on inhalation.

Precautionary Statements - Prevention

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 Wear respiratory protection Wear protective gloves/protective clothing/eye protection/face protection Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep/Store away from clothing/ combustible materials

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 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse 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 Water only; no dry chemical, CO₂ or Halon

Precautionary Statements - Storage

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

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-%
Trichloro-s-triazinetrione	87-90-1	99

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. If symptoms persist, call a physician.	
Skin contact	Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. 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. Artificial respiration and/or oxygen may be necessary. If symptoms persist, call a physician.	
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Have person sip a glass of water if able to swallow. Call a physician immediately.	
Self-protection of the first aider	Use personal protective equipment as required.	
Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	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

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	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,	

Methods for cleaning up	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. 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	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. 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. Do not mix with other chemicals. Keep/Store away from clothing/ combustible materials. Wash thoroughly after handling. Use only in well-ventilated areas.		
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.		
Incompatible materials	Incompatible with strong acids and bases. Ammonia. Calcium hypochlorite. Combustible		

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	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, suc	ch as personal protective equipment
Eye/face protection	Wear safety glasses with side shields (or goggles). Tight sealing safety goggles. Face protection shield.
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

Physical state Appearance Color	Solid dry, free flowing granules white	Odor Odor threshold	Chlorine No information available
Property	Values	Remarks • Method	
рН	2.9 - 3.5	in 1% Solution	
Melting point/freezing point	248 °C / 478 °F	Decomposes on heatin	g
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	2.1	g/cm3	
Bulk density	63 - 66	lbs / ft3	
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
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

Inhalation

This material in the form as sold is not expected to produce repiratory effects. Particles of respirable size are generally not encountered. The respirable fraction is typically less than 0.1% by weight. If ground or otherwise in a powdered form, effects similar to a corrosive substance may occur. Exposure to the solid product or to free chlorine evolving from the

product may cause irritation, redness of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.

Eye contact Severely irritating to eyes. Risk of serious damage to eyes. Causes burns.

Skin contact Irritating to skin. Contact with moist skin may cause skin burns. Causes burns.

Ingestion Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Trichloro-s-triazinetrione 87-90-1	= 406 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	0.09 - 0.29 mg/L (Rat)4 h

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	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic toxicity	Avoid repeated exposure.
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 (oral)	410 mg/kg
ATEmix (dermal)	2022 mg/kg
ATEmix (inhalation-dust/mist)	0.2 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

0.95% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Trichloro-s-triazinetrione	-	0.13 - 0.5: 96 h Lepomis	0.21: 48 h Daphnia magna mg/L
87-90-1		macrochirus mg/L LC50 static 0.06 -	EC50 0.16 - 0.18: 48 h Daphnia
		0.11: 96 h Oncorhynchus mykiss	magna mg/L EC50 Static
		mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

<u>Mobility</u> 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	UN2468 Trichloroisocyanuric acid, dry 5.1 II UN2468, Trichloroisocyanuric acid, dry, 5.1, II 140
<u>TDG</u> UN/ID no. Proper shipping name Hazard Class Description	UN2468 Trichloroisocyanuric acid, dry 5.1 UN2468, Trichloroisocyanuric acid, dry, 5.1, II
IATA_ UN/ID no. Proper shipping name Hazard Class Packing Group Description	UN2468 Trichloroisocyanuric acid, dry 5.1 II UN2468, Trichloroisocyanuric acid, dry, 5.1, II
IMDG UN/ID no. Proper shipping name Hazard Class Packing Group EmS-No. Description Marine pollutant	UN2468 Trichloroisocyanuric acid, dry 5.1 II F-A, S-Q UN2468, Trichloroisocyanuric acid, dry, 5.1, II This material meets the definition of a marine pollutant

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

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 Chronic Health Hazard Fire hazard Sudden release of pressure hazard	Yes No No 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
Trichloro-s-triazinetrione	Х	Х	Х
87-90-1			

U.S. EPA Label Information

EPA Pesticide Registration Number 5185-100

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 absorbed through skin. May be fatal if inhaled. Do not breathe dust or fumes. Irritating to nose and throat. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear goggles or safety glasses, protective clothing and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

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

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HMIS

Health hazards 3 Flammability 0

Flammability 0

Physical hazards 1

Instability 1

Physical and Chemical Properties OX Personal protection X

Prepared ByRegulatory AffairsRevision Date26-Mar-2015Revision NoteNo information available

Health hazards 3

Disclaimer

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