

# SAFETY DATA SHEET

16-Aug-2016

## 1. IDENTIFICATION

### Product identifier

**Product Name** PROGUARD CALCIUM HYPOCHLORITE GRANULAR

### Other means of identification

**Product Code** 22868BPG

**UN/ID no.** UN2880

### 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
Skin corrosion/irritation	Category 1 Sub-category B
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

Causes serious eye damage

May cause respiratory irritation

May intensify fire; oxidizer



**Color** white

**Physical state** Solid

**Odor** Chlorine

**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  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Keep/Store away from clothing/ combustible materials  
 Take any precaution to avoid mixing with combustibles - organic materials

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician  
 Specific treatment (see back panel on this label)  
 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  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting  
 In case of fire: Evacuate area. Water only; no dry chemical, CO<sub>2</sub> or Halon

**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**

19.5% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Mixture**

Chemical Name	CAS No.	Weight-%
calcium hypochlorite	7778-54-3	68
calcium dihydroxide	1305-62-0	1 - 3
calcium carbonate	471-34-1	1 - 3

**4. FIRST AID MEASURES**

**Description of first aid measures**

**General advice** Immediate medical attention is required.

**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. Do not rub affected area. Immediate medical attention is required.

<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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. Avoid contact with skin, eyes or clothing.

**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** 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**

**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**

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. Under extreme heat, this product will evolve noxious chlorine containing gases.

**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. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

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

**Methods for cleaning up** After cleaning, flush away traces with water. Take up mechanically, placing in appropriate containers for disposal. Use personal protective equipment as required. Cover powder spill

with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. Pick up and transfer to properly labeled containers. 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. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Use only in well-ventilated areas. Avoid creating dust.

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

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

**Incompatible materials** Incompatible with strong acids and bases. Incompatible with oxidizing agents. Avoid contact with water on concentrated material in the container. Ammonia. Acids. Bases. Do not mix with other swimming pool/spa chemicals in their concentrated forms. Do not mix with other chemicals. Reducing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
calcium dihydroxide 1305-62-0	TWA: 5 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> not in effect as a result of reconsideration	TWA: 5 mg/m <sup>3</sup>
calcium carbonate 471-34-1	-	-	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> 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** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such 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. 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**

<b>Physical state</b>	Solid	<b>Odor</b>	Chlorine
<b>Appearance</b>	dry, free flowing granules	<b>Odor threshold</b>	No information available
<b>Color</b>	white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		Alkaline
Melting point/freezing point	170 - 180 °C	Decomposes on heating
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	No information available	
Bulk density	63 - 67	lbs / ft3
Explosive properties	No information available	
Oxidizing properties	May intensify fire; oxidizer	

**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**

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. Extremes of temperature and direct sunlight.

**Incompatible materials**

Incompatible with strong acids and bases. Incompatible with oxidizing agents. Avoid contact with water on concentrated material in the container. Ammonia. Acids. Bases. Do not mix with other swimming pool/spa chemicals in their concentrated forms. Do not mix with other chemicals. Reducing agents.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Chlorine gas. Oxygen.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

- Inhalation** Harmful by inhalation. Irritating to respiratory system.
- 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. Harmful in contact with skin.
- Ingestion** Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
calcium hypochlorite 7778-54-3	= 850 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	-
calcium dihydroxide 1305-62-0	= 7340 mg/kg ( Rat )	-	-
calcium carbonate 471-34-1	= 6450 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** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
calcium hypochlorite 7778-54-3	-	Group 3	-	-

*IARC (International Agency for Research on Cancer)  
 Not classifiable as a human carcinogen*

**Reproductive toxicity** No information available.  
**STOT - single exposure** Respiratory system.  
**STOT - repeated exposure** No information available.  
**Chronic toxicity** Avoid repeated exposure.  
**Target Organ Effects** Eyes, Respiratory system, Skin.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Oral LD50** 850 mg/kg (rat)

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects

21.5% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
calcium hypochlorite 7778-54-3	-	0.049 - 0.16: 96 h Lepomis macrochirus mg/L LC50 static 0.5: 24 h Morone saxatilis mg/L LC50 static 0.4: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.054 - 0.06: 96 h Lepomis macrochirus mg/L LC50 semi-static 0.185 - 0.26: 96 h Cyprinus carpio mg/L LC50	-

		semi-static 0.055 - 0.1: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.13 - 0.2: 96 h Oncorhynchus mykiss mg/L LC50 static 0.561 - 1.41: 96 h Pimephales promelas mg/L LC50 static	
calcium dihydroxide 1305-62-0	-	160: 96 h Gambusia affinis mg/L LC50 static	-

**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.** UN2880  
**Proper shipping name** Calcium hypochlorite, hydrated  
**Hazard Class** 5.1  
**Packing Group** II  
**Emergency Response Guide Number** 140

**IATA**

**UN/ID no.** UN2880  
**Proper shipping name** Calcium hypochlorite, hydrated  
**Hazard Class** 5.1  
**Packing Group** II

**IMDG**

**UN/ID no.** UN2880  
**Proper shipping name** Calcium hypochlorite, hydrated  
**Hazard Class** 5.1  
**Packing Group** II  
**EmS-No.** F-H, S-Q  
**Marine pollutant** Yes

**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
calcium hypochlorite 7778-54-3	10 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)
calcium hypochlorite 7778-54-3	10 lb	-	RQ 10 lb final RQ RQ 4.54 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
calcium hypochlorite 7778-54-3	X	X	X
calcium dihydroxide 1305-62-0	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number 748-239-5185

**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 - Highly Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Wash thoroughly with soap and water after handling and before eating,



drinking, chewing gum, using tobacco, or going to the toilet. Remove and wash contaminated clothing and shoes before reuse. May be fatal if swallowed. Irritating to nose and throat. Avoid breathing dust.

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

<u>NFPA</u>	Health hazards 3	Flammability 0	Instability 2	Physical and Chemical Properties OX
<u>HMIS</u>	Health hazards 3	Flammability 0	Physical hazards 2	Personal protection X

Prepared By	Regulatory Affairs
Revision Date	16-Aug-2016
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**