

Material Safety Data Sheet

PROGUARD® GRANULAR CALCIUM HYPOCHLORITE

Version: 1.5

Revision Date: 08/02/2011

Print Date: 03/03/2012

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: *PROGUARD® GRANULAR CALCIUM HYPOCHLORITE*

Registration number: 5185-503

Company: Bio-Lab, Inc.
P.O. Box 300002
Lawrenceville, GA
30049-1002

Telephone: (800) 859-7946

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300, 703-527-3887
Poison Control Center (Medical) :: (877) 800-5553

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by: Product Safety Department
(US) +1 866-430-2775

08/02/2011

+011-886-2-2712-5668 MSDSRequest@chemtura.com

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

Form: granules Colour: white Odour: Chlorine

Hazard Summary : Oxidizer
Risk of serious damage to eyes.
May be fatal if swallowed.
Causes burns.
Harmful if inhaled.
Harmful if absorbed through skin.
Harmful: possible risk of irreversible effects in contact with skin and if swallowed.
Avoid breathing dust or vapor.
Causes respiratory tract irritation.
Do not get in eyes, on skin, or on clothing.
May cause allergic skin reaction.

OSHA Hazards : THIS MATERIAL IS HAZARDOUS UNDER THE CRITERIA OF THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD 29CFR 1910.1200.

Potential Health Effects

Aggravated Medical : Respiratory disorder

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Condition Skin disorders

Inhalation : Irritating to respiratory system.

Skin : On contact with moisture, this material readily hydrolyzes to acid which may result in burns if not promptly removed.
Harmful if absorbed through skin.

Eyes : Causes serious eye damage.

Ingestion : May be fatal if swallowed.

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component / CAS-No.	Weight percent
calcium hypochlorite 7778-54-3	57.8 %
calcium dihydroxide 1305-62-0	< 5 %
calcium carbonate 471-34-1	< 5 %

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation : Move to fresh air.
If not breathing, give artificial respiration.
Call a POISON CENTER or doctor/ physician.
Get medical attention immediately.

Skin contact : Remove/Take off immediately all contaminated clothing.
Wash off immediately with plenty of water for at least 15 minutes.
Call a POISON CENTER or doctor/ physician.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.
Call a POISON CENTER or doctor/ physician.

Ingestion : Call a physician or poison control centre immediately.

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DO NOT induce vomiting unless directed to do so by a physician or poison control center.

Have person sip a glass of water if able to swallow.

Never give anything by mouth to an unconscious person.

Notes to physician

Treatment : Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point : Remarks: not applicable

Fire fighting

Suitable extinguishing media : Water
Flood with large volumes of water.

Unsuitable extinguishing media : ABC powder
Dry chemical
Risk of violent reaction.

Further information : Do not let fire burn.
Contact with combustible material may cause fire.

Protective equipment and precautions for firefighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : Avoid release to the environment.

Methods for containment / Methods for cleaning up : Wear suitable protective clothing, gloves and eye/face protection.
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 flush into surface water or sanitary sewer system.
Do not add water to spilled material.
Shovel into suitable container for disposal.
Do not close containers containing wet or damp material. They should be left open to disperse any hazardous gases that may form.

Additional advice : Do not use floor sweeping compounds to clean up spills.
Do not transport wet or damp material.

SECTION 7. HANDLING AND STORAGE

Handling

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Handling procedures : Avoid contact with skin and eyes.
Use only in area provided with appropriate exhaust ventilation.
Use only clean and dry utensils.
Do not breathe vapours/dust.
Mix only with water.
Never add water to this product.
Always add product to large quantities of water.
Do not mix with other chemicals.
Wash thoroughly after handling.
In case of contamination or decomposition, do not reseal container.
If possible, isolate container in open air or well ventilated area.
Contamination with moisture, organic matter or other chemicals may start a chemical reaction and generate heat, hazardous gas, possible fire and explosion.
Do not handle until all safety precautions have been read and understood.
Contains a strong oxidizing agent.
Do not add this product to any dispensing devices containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion.

Storage

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep only in the original container.
Keep container closed when not in use.
Keep away from heat and open flame.
Protect from moisture.
Keep out of reach of children.
Keep away from animals.
Keep product packaging clean and free of all contamination, including other pool treatment products, acids, organic materials, nitrogen-containing compounds, oxidizers, corrosive liquids and flammable or combustible materials.
For bags: Store dry product in its original unopened bag until use. For partially used bags, fold over top of bag and secure with adhesive tape.
Shelf Life Limitations: Do not store this product where average daily temperature exceeds 95 F/35 C. Storage above this temperature may result in product decomposition, evolution of chlorine gas, and generation of heat sufficient to ignite combustible products. Shelf life is determined by storage time and temperature. Store in a cool, dry, and well ventilated area. Prolonged storage at elevated temperatures will significantly shorten shelf life. Storage in a climate controlled area is recommended in those areas where extremes of high temperature can occur. During storage, do not allow product to come into contact with other materials including other pool treatment products, acids, organic materials, nitrogen-containing compounds, oxidizers, corrosive liquids, and flammable or combustible materials.
For bottles: Store dry product in original tightly closed container when not in use.

Further information on storage conditions : Do not allow cartons, cases or containers of product to become wet or store where they may be subject to either high humidity or moisture.
Do not store next to heat source, in direct sunlight, or elevated storage temperature. Do not store at temperatures above 95 F. Prevent ingress of humidity or moisture into the container, package or carton. Store in well ventilated area.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

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Components with workplace control parameters

Components / CAS-No.	Value / Basis / Update	Control parameters	Further information
calcium dihydroxide 1305-62-0	TWA ACGIH 2007-01-01	5 mg/m3	
	TWA OSHA P1 2007-01-01	15 mg/m3	
	TWA OSHA P1 2007-01-01	5 mg/m3	
	TWA OSHA P0 1989-01-19	5 mg/m3	

Engineering measures

Personal protective equipment

Eye protection : Goggles
or
Face-shield

Hand protection : Rubber gloves

Respiratory protection : Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

Hygiene measures : Remove and wash contaminated clothing before re-use.
Provide adequate ventilation.
Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : granules
Colour : white

Odour : Chlorine

Safety data

Flash point : Note: not applicable

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pH	: 10.2 Note: 1% Solution
Freezing point	: Note: not applicable
Melting point/range	: Note: no data available
Boiling point/boiling range	: Note: not applicable
Vapour pressure	: Note: no data available
Density	: 1.08 g/cm ³
Water solubility	: ca.180 g/l at 77 °F (25 °C)
Relative vapour density	: Note: no data available

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	: Remarks: Heat, flames and sparks. Direct sources of heat. Strong sunlight for prolonged periods. If subject to excessive temperature, the product may undergo rapid decomposition, evolution of chlorine gas, and heat sufficient to ignite combustible substances. If product is exposed to small amount of water, it can react to produce heat and chlorine gas. Use copious amounts of water for fires involving this product.
Materials to avoid	: Remarks: Avoid contact with water on concentrated material in the container. Avoid contact with easily oxidizable material; ammonia, urea, or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; chlorinated isocyanurates; other swimming pool/spa chemicals in their concentrated form; acids. Avoid contact with all other chemicals. Do not mix with other chemicals or any other substance.
Hazardous decomposition products	: Note: Oxygen Chlorine containing gases can be produced.
Hazardous reactions	: Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50: 1,113 mg/kg Species: rat
Acute inhalation toxicity	: Remarks: This material in the form as sold is not expected to produce respiratory effects. If ground or otherwise in a powdered form, effects similar to a corrosive substance may occur. May cause severe irritation of the respiratory tract with coughing, choking,

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pain and possibly burns of the mucous membranes.

Acute dermal toxicity	: LD50: > 2,000 mg/kg Species: rabbit
Skin irritation	: Species: rabbit Result: Corrosive : Remarks: Direct contact with wet material or moist skin may cause severe irritation, pain and possibly burns. : Remarks: Dry chemical In vitro study Non-corrosive
Eye irritation	: Remarks: Causes serious eye damage.
Sensitisation	: Maximisation Test Species: guinea pig Remarks: The results of a test on guinea pigs showed this substance to be a weak skin sensitizer.
Reproductive toxicity calcium carbonate	: Species: rat Application Route: Oral
CMR effects calcium carbonate	: Teratogenicity: No effects on or via lactation Reproductive toxicity: No toxicity to reproduction

12. ECOLOGICAL INFORMATION

Toxicity to fish calcium dihydroxide	: LC50: 160 mg/l Exposure time: 96 h Species: Gambusia affinis (Mosquito fish) static test
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Further information on ecology

SECTION 13. DISPOSAL CONSIDERATIONS

Further information	: Dispose of waste material in compliance with all federal, state, and local regulations. Do not re-use empty containers. Do not contaminate ponds, waterways or ditches with chemical or used container. Triple rinse containers. Contact with incompatible materials could cause a reaction or fire. Offer rinsed packaging material to local recycling facilities. Do not
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put product, spilled product, or filled or partially filled containers into the trash or waste compactor.

SECTION 14. TRANSPORT INFORMATION

DOT

UN number : 2880
Description of the goods : Calcium hypochlorite, hydrated mixtures
Class : 5.1
Packing group : II
ERG Code : 140

IATA

UN number : 2880
Description of the goods : Calcium hypochlorite, hydrated mixture
Class : 5.1
Packing group : II
Labels : 5.1
Environmentally hazardous : no

IMDG

UN number : 2880
Description of the goods : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE
Class : 5.1
Packing group : II
Labels : 5.1
EmS Number 1 : F-H
EmS Number 2 : S-Q

Marine pollutant : yes
CALCIUM HYPOCHLORITE MIXTURE
Environmentally hazardous : yes
CALCIUM HYPOCHLORITE MIXTURE

Not recommended for shipment by air
Not regulated by DOT and TDG if shipped or transported in packaging less than 400KG by road and/or rail.

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

CERCLA Reportable Quantity : 12 lbs

SARA 311/312 Hazards : calcium hypochlorite 7778-54-3 10 lbs
Acute Health Hazard

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The components of this product are reported in the following inventories:

REACH

Not in compliance with the inventory

CH INV

The formulation contains substances listed on the Swiss Inventory

US.TSCA

Not On TSCA Inventory

DSL

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

AICS

Not in compliance with the inventory

ENCS

Not in compliance with the inventory

ISHL

Not in compliance with the inventory

KECI

Not in compliance with the inventory

PICCS

On the inventory, or in compliance with the inventory

IECSC

Not in compliance with the inventory

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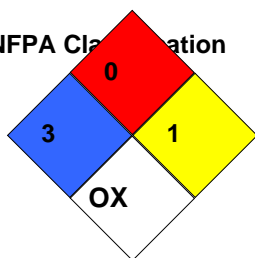
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SECTION 16. OTHER INFORMATION

Further information

HMIS Classification : Health hazard: 3
Flammability: 0
Physical hazards: 1

NFPA Classification : Health hazard: 3
Fire Hazard: 0
Reactivity Hazard: 1
Specific hazards: OX Class 1
Oxidizer.



Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 555 004 8763

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