

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** BioGuard Calcium Hardness Tablets  
**Catalog Number:** J50449

Bio-Lab, Inc.  
P.O. Box 300002  
Lawrenceville, GA USA 30049  
(800) 859-7946

24 HR. Emergency  
Telephone Numbers:  
(800) 424-9300 CHEMTREC (Transportation)  
(877) 800-5553 Poison Control Center (Medical)

**MSDS Number:** M01821  
**Chemical Name:** Not Applicable  
**CAS Number:** Not applicable  
**Additional CAS No. (for hydrated forms):** Not applicable  
**Chemical Formula:** Not Applicable  
**Chemical Family:** Not applicable  
**Intended Use:** Water Analysis

## 2. HAZARDS IDENTIFICATION

### GHS Classification:

**Hazard categories:** Acute Toxicity: Acute Tox. 4-Orl Acute Toxicity: Acute Tox. 4-Inh Skin Corrosion/Irritation:  
Skin Corr. 1A Serious Eye Damage/Eye Irritation: Eye Dam. 1 Specific Target Organ Toxicity - Single Exposure:  
STOT SE 3 Corrosive to Metals: Met. Corr. 1

### GHS Label Elements:

DANGER



**Hazard statements:** Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. Harmful if swallowed. Harmful if inhaled. May be corrosive to metals.

**Precautionary statements:** Keep only in original container. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye protection. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim/person to fresh air and keep at rest in a position comfortable for breathing. 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. P321 Specific treatment (see supplemental first aid instructions on this label). Rinse mouth. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. P406 Store in corrosive resistant container with a resistant inner liner. Dispose of contents/container according to state, local, federal or national regulations.

### HMIS:

**Health:** 3

**Flammability:** 0

**Reactivity:** 0

**Protective Equipment:** B - Safety Glasses and Gloves

### NFPA:

**Health:** 3

**Flammability:** 0

**Reactivity:** 0

**Symbol:** Not applicable

**WHMIS Hazard Classification:** Class D, Division 2, Subdivision B - Toxic material (other toxic effects) Class E - Corrosive material

**WHMIS Symbols:** Corrosive Other Toxic Effects

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous Components according to GHS:**

**Lithium Hydroxide**

**CAS Number:** 1310-65-2

**Chemical Formula:** LiOH · H<sub>2</sub>O

**GHS Classification:** Met. Corr. 1, H290; Acute Tox. 3 -Orl., H301; Skin Corr. 1A, H314; Acute Tox. 3 - Inh, H331

**Percent Range (Trade Secret):** 10-30

**Percent Range Units:** weight / weight

**PEL:** 15 mg/m<sup>3</sup> as inhalable dust; 5 mg/m<sup>3</sup> as respirable dust

**TLV:** 10 mg/m<sup>3</sup> as inhalable dust; 3 mg/m<sup>3</sup> as respirable dust

**WHMIS Symbols:** Corrosive Acute Poison

**Talc**

**CAS Number:** 14807-96-6

**Chemical Formula:** 3MgO 4SiO<sub>2</sub> H<sub>2</sub>O

**GHS Classification:** Acute Tox. 4-Inh, H332; Skin Irrit. 3, H316; STOT Single 3, H335

**Percent Range (Trade Secret):** 10-30

**Percent Range Units:** weight / weight

**PEL:** 20 mppcf for talc containing no asbestos

**TLV:** 2 mg/m<sup>3</sup> (TWA) respirable dust for talc containing no asbestos

**WHMIS Symbols:** Other Toxic Effects

**Ethylenediaminetetraacetic Acid, Disodium Salt**

**CAS Number:** 139-33-3

**Chemical Formula:** C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>Na<sub>2</sub>O<sub>8</sub> 2H<sub>2</sub>O

**GHS Classification:** Acute Tox. 5-Orl, H303; Eye Irrit. 2A, H319; Aquatic Acute 2, H401

**Percent Range (Trade Secret):** 5.0 - 10.0

**Percent Range Units:** weight / weight

**PEL:** 15 mg/m<sup>3</sup> as total dust; 5 mg/m<sup>3</sup> as respirable dust

**TLV:** 10 mg/m<sup>3</sup> as inhalable dust; 3 mg/m<sup>3</sup> as respirable dust

**WHMIS Symbols:** Not applicable

**EDTA Tetrasodium Salt**

**CAS Number:** 64-02-8

**Chemical Formula:** C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>Na<sub>4</sub>O<sub>8</sub> 2H<sub>2</sub>O

**GHS Classification:** Acute Tox. 4-Orl, H302; Eye Dam. 1, H318

**Percent Range (Trade Secret):** 5.0 - 10.0

**Percent Range Units:** weight / weight

**PEL:** 15 mg/m<sup>3</sup> as total dust; 5 mg/m<sup>3</sup> as respirable dust

**TLV:** 10 mg/m<sup>3</sup> as inhalable dust; 3 mg/m<sup>3</sup> as respirable dust

**WHMIS Symbols:** Other Toxic Effects

**Hazardous Components according to GHS:** No

**Cellulose, Microcrystalline**

**CAS Number:** 9004-34-6

**Chemical Formula:** (C<sub>6</sub>H<sub>10</sub>O<sub>5</sub>)<sub>n</sub>; n=1000-10000

**GHS Classification:** Acute Tox. 5-Derm, H313  
**Percent Range (Trade Secret):** 30 - 60  
**Percent Range Units:** weight / weight  
**PEL:** 15 mg/m<sup>3</sup> total dust; 5 mg/m<sup>3</sup> respirable fraction for nuisance dusts  
**TLV:** 3mg/m<sup>3</sup> respirable particles and 10 mg/m<sup>3</sup> inhalable particles

**WHMIS Symbols:** Not applicable

#### **Murexide**

**CAS Number:** 3051-09-0  
**Chemical Formula:** C<sub>8</sub>H<sub>5</sub>N<sub>3</sub>O<sub>6</sub> · NH<sub>3</sub>  
**GHS Classification:** non hazardous  
**Percent Range (Trade Secret):** < 1.0  
**Percent Range Units:** weight / volume  
**PEL:** 15 mg/m<sup>3</sup> as total dust; 5 mg/m<sup>3</sup> as respirable fraction  
**TLV:** Not established.

**WHMIS Symbols:** Not applicable

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## **4. FIRST AID MEASURES**

**General Information:** In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

**Advice to doctor:** May present aspiration hazard

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Wash skin with soap and plenty of water. Call physician if irritation develops.

**Inhalation:** Remove to fresh air.

**Ingestion (First Aid):** Give 1-2 glasses of water. Never give anything by mouth to an unconscious person. Call physician immediately.

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## **5. FIRE FIGHTING MEASURES**

**Flammable Properties:** Can burn in fire, releasing toxic vapors.

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Extinguishing Media NOT To Be Used:** Not applicable

**Fire / Explosion Hazards:** None reported

**Hazardous Combustion Products:** Toxic fumes of: carbon monoxide, carbon dioxide.

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## **6. ACCIDENTAL RELEASE MEASURES**

### ***Spill Response Notice:***

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.

**Containment Technique:** Stop spilled material from being released to the environment.

**Clean-up Technique:** If permitted by regulation, Scoop up spilled material into a large beaker and dissolve with water. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution. Otherwise, Dispose of in accordance with local, state and federal regulations or laws.

**Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.

**DOT Emergency Response Guide Number:** 154

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## **7. HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes skin clothing Maintain general industrial hygiene practices when using this product.

**Storage:** Keep this product in its original container when not in use. Store in a cool, dry, well-ventilated place. Keep this product and all other chemicals out of children's reach.

**Flammability Class:** Not applicable

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Have an eyewash station nearby. Have a safety shower nearby. Use general ventilation to minimize exposure to mist, vapor or dust. Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields

**Skin Protection:** disposable latex gloves

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin clothing

**TLV:** Not Established

**PEL:** Not Established

**For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:**

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Pink

**Physical State:** Solid

**Molecular Weight:** Not Applicable

**Odor:** None

**Odor Threshold:** Odorless

**pH:** 12 (1 tablet in 10 mL of water)

**Metal Corrosivity:**

**Corrosivity Classification:**

**Steel:**

**Aluminum:**

**Specific Gravity/ Relative Density (water = 1; air =1):** Not Determined

**Viscosity:** Not applicable

**Solubility:**

**Water:** Soluble

**Acid:** Not Determined

**Other:** Not Determined

**Partition Coefficient (n-octanol / water):** Not Determined

**Coefficient of Water / Oil:** Not Determined

**Melting Point:** Not Determined

**Decomposition Temperature:** Not determined

**Boiling Point:** Not Applicable

**Vapor Pressure:** Not Applicable

**Vapor Density (air = 1):** Not Applicable

**Evaporation Rate (water = 1):** Not Applicable

**Volatile Organic Compounds Content:** Not Determined

**Flammable Properties:** Can burn in fire, releasing toxic vapors.

**Flash Point:** Not Applicable

**Method:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not Applicable

**Upper Explosion Limits:** Not Applicable

**Autoignition Temperature:** Not Determined

**Explosive Properties:**

Not classified according to GHS criteria.

**Oxidizing Properties:**

Not classified according to GHS criteria.

**Reactivity Properties:**

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

**Gas under Pressure:**

Not classified according to GHS criteria.

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## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Mechanical Impact:** None reported

**Static Discharge:** None reported.

**Reactivity / Incompatibility:** None reported

**Hazardous Decomposition:** Heating to decomposition releases toxic and/or corrosive fumes of: carbon dioxide carbon monoxide

**Conditions to Avoid:** Excess moisture Excessive heat

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## 11. TOXICOLOGICAL INFORMATION

**Toxicokinetics, Metabolism and Distribution:** No information available for mixture.

**Toxicologically Synergistic Products:** None reported

**Acute Toxicity:** Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data Route Data Given Below 657

**Specific Target Organ Toxicity - Single Exposure (STOT-SE):** Respiratory Tract

**Specific Target Organ Toxicity - Repeat Exposure (STOT-RE):** Based on classification principles, the classification criteria are not met.

**Skin Corrosion/Irritation:** Corrosive to skin.

**Eye Damage:** Assessment based on pH

**Sensitization:** Based on classification principles, the classification criteria are not met.

**CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction):** Based on classification principles, the classification criteria are not met.

This product does NOT contain any NTP listed chemicals.

This product does NOT contain any OSHA listed carcinogens.

**Symptoms/Effects:**

**Ingestion:** May be harmful if swallowed

**Inhalation:** May cause: respiratory tract irritation

**Skin Absorption:** None Reported

**Chronic Effects:** None reported

**Medical Conditions Aggravated:** Pre-existing: Eye conditions Skin conditions Respiratory conditions

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product.

**Ingredient Ecological Information:** EDTA, 2Na: Bluegill LC50=159 mg/L - 96 hr; Green algae ErC50 10-100 mg/L; EDTA, 4Na: Bluegill LC50=410 mg/L - 96hr; Daphnia magna LC50 = 625 mg.L

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## 13. DISPOSAL CONSIDERATIONS

**EPA Waste ID Number:** D002

**Special Instructions (Disposal):** Dilute to 3 to 5 times the volume with cold water. Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

**Empty Containers:** Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

**NOTICE (Disposal):** These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

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## 14. TRANSPORT INFORMATION

**D.O.T.:**

**D.O.T. Proper Shipping Name:** Lithium Hydroxide

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**Hazard Class:** 8

**Subsidiary Risk:** NA

**ID Number:** UN2680

**Packing Group:** II

**T.D.G.:**

**Proper Shipping Name:** Lithium Hydroxide

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**Hazard Class:** 8

**Subsidiary Risk:** NA

**UN Number/PIN:** 2680

**Packing Group:** II

**I.C.A.O.:**

**I.C.A.O. Proper Shipping Name:** Lithium Hydroxide

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**Hazard Class:** 8

**Subsidiary Risk:** NA

**ID Number:** UN2680

**Packing Group:** II

**I.M.O.:**

**Proper Shipping Name:** Lithium Hydroxide

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**Hazard Class:** 8

**Subsidiary Risk:** NA

**ID Number:** UN2680

**Packing Group:** II

**Additional Information:** There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15. REGULATORY INFORMATION

**U.S. Federal Regulations:**

**O.S.H.A.:** This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

**E.P.A.:**

**S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370):** Immediate (Acute) Health Hazard

**S.A.R.A. Title III Section 313 (40 CFR 372):** This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

**302 (EHS) TPQ (40 CFR 355):** Not applicable

**304 CERCLA RQ (40 CFR 302.4):** Not applicable

**304 EHS RQ (40 CFR 355):** Not applicable

**Clean Water Act (40 CFR 116.4):** Not applicable

**RCRA:** Contains no RCRA regulated substances.

**State Regulations:**

**California Prop. 65:** No Prop. 65 listed chemicals are present in this product.

**Identification of Prop. 65 Ingredient(s):** Not applicable

**California Perchlorate Rule CCR Title 22 Chap 33:** Not applicable

**Trade Secret Registry:** Not applicable

**National Inventories:**

**U.S. Inventory Status:** All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

**CAS Number:** Not applicable

**Canadian Inventory Status:** All ingredients of this product are DSL/NDL Listed.

**EEC Inventory Status:** All ingredients used to make this product are listed on EINECS / ELINCS.

**Australian Inventory (AICS) Status:** Not determined

**New Zealand Inventory (NZIoC) Status:** Not determined

**Korean Inventory (KECI) Status:** Not determined

**Japan (ENCS) Inventory Status:** Not determined

**China (PRC) Inventory (MEP) Status:** Not determined

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## 16. OTHER INFORMATION

**References:** TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. In-house information. Technical Judgment. Outside Testing. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. Vendor Information.

**Complete Text of H phrases referred to in Section 3:** H302 Harmful if swallowed. H332 Harmful if inhaled. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H290 May be corrosive to metals.

**Revision Summary:** Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

**Date of MSDS Preparation:**

**Day:** 08

**Month:** December

**Year:** 2014

**MSDS Prepared:** MSDS prepared by Product Compliance Department extension 3350

**CCOHS Evaluation Note:** It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17.

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### Legend:

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

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