

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: BioGuard Copper Tablets
Catalog Number: J50454

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: M01831
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: . . . Skin Corrosion/Irritation: Skin Irrit. 2 Serious Eye Damage/Eye Irritation: Eye Dam. 1 . . .
Respiratory or Skin Sensitization: Resp. Sens.1 Reproductive Toxicity: Repr. 1B

GHS Label Elements:

DANGER



Hazard statements: . . . Causes skin irritation. Causes serious eye damage. . . May cause allergy or asthma symptoms or breathing difficulties if inhaled. May damage fertility. Suspected of damaging the unborn child.

Precautionary statements: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Wear eye protection. P285: In case of inadequate ventilation wear respiratory protection. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: If breathing is difficult, 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. IF exposed or concerned: Get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. P321 Specific treatment (see supplemental first aid instructions on this label). If skin irritation occurs: Get medical advice/attention. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Take off contaminated clothing and wash before reuse.

HMIS:

Health: 2

Flammability: 1

Reactivity: 0

Protective Equipment: X - See protective equipment, Section 8.

NFPA:

Health: 2

Flammability: 1

Reactivity: 0

Symbol: Not applicable

WHMIS Hazard Classification: Class D, Division 1, Subdivision A - Very toxic materials (immediate effects) Class D, Division 2, Subdivision A - Very toxic materials (other toxic effects)
WHMIS Symbols: Other Toxic Effects

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:

Boric Acid

CAS Number: 10043-35-3

Chemical Formula: H_3BO_3

GHS Classification: Acute Tox. 5 -Orl, H303; Acute Tox. 5-Derm, H313; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Acute Tox. 5-Inh, H333; Repr. 1B, H360; STOT Single 2, H371

Percent Range (Trade Secret): 30 - 60

Percent Range Units: weight / weight

PEL: 15 mg/m³ as inhalable dust; 5 mg/m³ as respirable dust

TLV: 2 mg/m³

WHMIS Symbols: Acute Poison

Potassium Phosphate, Monobasic

CAS Number: 7778-77-0

Chemical Formula: KH_2PO_4

GHS Classification: Acute Tox. 4 - Orl, H302; Eye Irrit. 2, H319

Percent Range (Trade Secret): 10-30

Percent Range Units: weight / weight

PEL: 15 mg/m³ as total dust; 5 mg/m³ as respirable dust

TLV: 10 mg/m³ as inhalable fraction; 3 mg/m³ as respirable fraction

WHMIS Symbols: Not applicable

Sodium Metabisulfite

CAS Number: 7681-57-4

Chemical Formula: $\text{Na}_2\text{S}_2\text{O}_5$

GHS Classification: Acute Tox. Orl 4, H302; Acute Tox. Derm 5, H313; Acute Tox. Inh. 4, H332; Skin Irrit. 2, H315; Eye Dam. 1, H318; Resp. Sens. 1, H334; Aquatic Chronic 3, H412

Percent Range (Trade Secret): 5.0 - 10.0

Percent Range Units: weight / weight

PEL: 15 mg/m³ as inhalable dust; 5 mg/m³ as respirable dust

TLV: 5 mg/m³

WHMIS Symbols: Other Toxic Effects

Sodium Bicarbonate

CAS Number: 144-55-8

Chemical Formula: NaHCO_3

GHS Classification: Acute Tox. 5-Orl, H303; Skin irrit. 3, H316

Percent Range (Trade Secret): 5.0 - 10.0

Percent Range Units: weight / weight

PEL: 15 mg/m³ as inhalable dust; 5 mg/m³ as respirable dust

TLV: 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust

WHMIS Symbols: Not applicable

Bicinchoninic Acid, Disodium Salt

CAS Number: 979-88-4

Chemical Formula: $\text{C}_{20}\text{H}_{10}\text{N}_2\text{O}_4\text{Na}_2$

GHS Classification: Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Resp. Sens. 1, H334; STOT Single 3, H335

Percent Range (Trade Secret): < 1.0
Percent Range Units: weight / weight
PEL: 15 mg/m3 as inhalable dust; 5 mg/m3 as respirable dust
TLV: 10 mg/m3 as inhalable dust; 3 mg/m3 as respirable dust

WHMIS Symbols: Not applicable

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: Treat symptomatically.

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: Not applicable

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

5. FIRE FIGHTING MEASURES

Flammable Properties: Can burn in fire, releasing toxic vapors. Material is not classified as flammable according to GHS criteria.

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: boron compounds phosphorus oxides sulfur oxides.

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: Scoop up spilled material into a large beaker and dissolve with water. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution.

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

DOT Emergency Response Guide Number: Not applicable

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

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.:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow
Physical State: Solid
Molecular Weight: Not Applicable
Odor: None
Odor Threshold: Odorless
pH: Not Determined
Metal Corrosivity:
Corrosivity Classification: Not classified as corrosive to metals according to GHS criteria.
Steel: Not determined
Aluminum: Not determined
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 Applicable
Coefficient of Water / Oil: Not Applicable
Melting Point: Not Applicable
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 Applicable
Flammable Properties: Can burn in fire, releasing toxic vapors. Material is not classified as flammable according to GHS criteria.
Flash Point: Not Applicable
Method: Not applicable
Flammability Limits:
Lower Explosion Limits: Not Applicable
Upper Explosion Limits: Not Applicable
Autoignition Temperature: Not applicable
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.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.
Mechanical Impact: Not applicable
Static Discharge: Not determined
Reactivity / Incompatibility: strong acids

Hazardous Decomposition: Heating to decomposition releases toxic and/or corrosive fumes of: sulfur oxides boron compounds phosphorus oxides
Conditions to Avoid: Excess moisture Excessive heat

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
Based on classification principles, the classification criteria are not met.

Oral Rat LD50 = 2260 mg/kg

Dermal Rabbit/Guinea pig LD50 > 2412 mg/kg

Inhalation Rat LC50 > 6.0 mg/L/4 hr

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

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

Skin Corrosion/Irritation: Irritating to skin.

Eye Damage: Corrosive to eyes.

Sensitization: Respiratory Sensitizer Contains a sensitizing compound.

Sodium metabisulfite and Disodium Bicinchoninate

CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): Contains a reproductive toxin.

Boric acid

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 May cause: harm to unborn child,

Inhalation: Harmful

Skin Absorption: May be harmful if absorbed through skin.

Chronic Effects: None reported

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

12. ECOLOGICAL INFORMATION

Product Ecological Information: --

No ecological data available for this product. Based on classification principles, not classified as hazardous to the environment.

Ingredient Ecological Information: --

Ecological data for ingredients is not indicative of likely ecological harm.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not determined

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.

14. TRANSPORT INFORMATION

D.O.T.:

D.O.T. Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA
Subsidiary Risk: NA
ID Number: NA
Packing Group: NA

T.D.G.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA
Subsidiary Risk: NA
UN Number/PIN: NA
Packing Group: NA

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA
Subsidiary Risk: NA
ID Number: NA
Packing Group: NA

I.M.O.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA
Subsidiary Risk: NA
ID Number: NA
Packing Group: NA

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.

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

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.

Complete Text of H phrases referred to in Section 3: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H412 Harmful to aquatic life with long lasting effects. H360FD May damage fertility. May damage the unborn child. H371 May cause damage to organs. H335 May cause respiratory irritation. H302 Harmful if swallowed. H319 Causes serious eye irritation. . H332 Harmful if inhaled. H318 Causes serious eye damage.

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: 12

Month: September

Year: 2014

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: Not applicable

Legend:

NA - Not Applicable

ND - Not Determined

NV - Not Available

w/w - weight/weight

w/v - weight/volume

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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