

MATERIAL SAFETY DATA SHEET

MSDS

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Date-Issued: 06/30/1997
MSDS Ref. No: BBIO23470
Date-Revised: 06/13/2000
Revision No: 3

BioGuard Scale Inhibitor

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BioGuard Scale Inhibitor
GENERAL USE: Prevents scale build-up.
CHEMICAL FAMILY: Phosphonates

MANUFACTURER

Bio-Lab, Inc.
BioGuard
P.O. Box 1489
Decatur, GA 30031
Customer SERVICE: 800-859-7946

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (Transportation) (800) 424-9300
Poison Control Center (Medical) 877-800-5553

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS#</u>	<u>Wt. %</u>
2-phosphono-1,2,4-butanetricarboxylic acid	37971-36-1	12.5

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE:
Clear, colorless to light yellow liquid.

IMMEDIATE CONCERNS:

WARNING: Causes eye irritation. May be harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear safety glasses when handling this product. If product gets on clothing, remove and wash before reuse.

POTENTIAL HEALTH EFFECTS

EYES:
Moderately irritating to the eyes.

SKIN:
May cause mild skin irritation.

INGESTION:
May be harmful if swallowed.

INHALATION:
May be irritating to nose and throat. Avoid breathing vapors.

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CHRONIC:

There are no known chronic hazards.

ROUTES OF ENTRY:

Skin Contact, Inhalation, Ingestion, Eye Contact.

4. FIRST AID MEASURES

EYES:

If contact with eyes occurs: Immediately flush with cold water for at least 15 minutes. Then get immediate medical attention.

SKIN:

If contact with skin: Rinse off excess chemical and wash thoroughly with soap and water. If irritation develops, get medical attention.

INGESTION:

If swallowed: Drink large amounts of water. Do not induce vomiting. Avoid alcohol. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Call a physician or poison control center immediately.

INHALATION:

If inhaled: Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If not breathing, give artificial respiration. Call a physician immediately.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: None to 212 F

AUTOIGNITION TEMPERATURE: 500°C (932°F)

GENERAL HAZARD:

There are no unusual fire and explosion hazards known.

EXTINGUISHING MEDIA:

Carbon Dioxide, Dry Chemical, Water

FIRE FIGHTING EQUIPMENT:

Firefighters should wear full protective clothing and self contained breathing apparatus (SCBA). Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

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6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES:

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Utilizing appropriate clothing and safety equipment, contain spill material. Cover the liquid with an inert absorbent. Using clean, dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry plastic containers for disposal. Dispose of according to local, state and federal regulations.

7. HANDLING AND STORAGE

GENERAL PROCEDURES:

Avoid contact with eyes, skin or clothing.

HANDLING:

Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

STORAGE:

Keep this product in original closed container when not in use. Store in a cool, dry, well ventilated area away from heat or open flame. After emptying canister, rinse thoroughly and place in trash collection. DO NOT reuse canister.

STORAGE TEMPERATURE: 100°C (212°F) maximum

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL ppm	OSHA PEL mg/m ³	ACGIH TLV ppm	ACGIH TLV mg/m ³	SUPPLIER OEL ppm	SUPPLIER OEL mg/m ³
2-phosphono-1,2,4-butanetricarboxylic acid	TWA	N/E ^[1]		N/E			

OSHA TABLE COMMENTS:

1. N/E = Not Established

ENGINEERING CONTROLS:

General room ventilation plus local exhaust should be used to minimize exposure to vapors.

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PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE:

Wear goggles or safety glasses with side shields when handling this product.

SKIN:

With repeated or prolonged use, wear gloves.

RESPIRATORY:

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

WORK HYGIENIC PRACTICES:

If product gets on clothing, remove and wash before reuse.

OTHER USE PRECAUTIONS:

Facilities storing or utilizing this material should be equipped with an eyewash and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Odorless

APPEARANCE: Clear

COLOR: Colorless to light yellow

pH: <3.5

VAPOR PRESSURE: Not Established

VAPOR DENSITY: Not Established

BOILING POINT: Not Established

FREEZING POINT: Not Established

SOLUBILITY IN WATER: Miscible in Water

SPECIFIC GRAVITY: 1.06 g/ml

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:

High temperature. Poor ventilation. Contamination.

STABILITY:

This product is stable under normal conditions.

POLYMERIZATION:

Hazardous polymerization will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS:

Phosphoric acid, carbon monoxide, carbon dioxide and other unidentified by-products.

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INCOMPATIBLE MATERIALS:

Other swimming pool/spa chemicals in their concentrated forms. Bases. Strong alkalis.

11. TOXICOLOGICAL INFORMATION

ACUTE

ORAL LD₅₀: >6500 mg/kg of body weight in rats

EYE EFFECTS:

This product is a moderate eye irritant.

SKIN EFFECTS:

Mildly irritating to skin.

CARCINOGENICITY:

This product is not listed as a carcinogen by IARC.

This product is not listed as a carcinogen by NTP.

This product is not listed as a carcinogen by OSHA.

MUTAGENICITY:

Mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

This product may be toxic to fish and aquatic organisms. Keep product from entering waterways and watersheds.

13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL:

Disposal of unused, uncontaminated product is regulated according to local, state and federal regulations.

EMPTY CONTAINER:

Do not reuse container. Rinse thoroughly before discarding in trash.

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14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Corrosive Liquids, N.O.S. (Contains Phosphonic Acid)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: 1760

PACKING GROUP: III

OTHER SHIPPING INFORMATION: Limited Quantity

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: This product or its components are not listed.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: This product or its components are not listed.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product or its components are not subject to export notification.

TSCA STATUS: This product or its components are listed on the TSCA Inventory.

OSHA HAZARD COMM. RULE:

Product is hazardous by definition of the Hazardous Communication Standard.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):

This product is not a registered pesticide.

16. OTHER INFORMATION

REVISION SUMMARY

Revision #: 3

This MSDS replaces the November 21, 1997 MSDS. Any changes in information are as follows:

In Section 3

Emergency Overview - Immediate Concerns (text) Potential Health Effects - Eyes (text) Potential Health Effects - Skin (text) Potential Health Effects - Ingestion (text)

In Section 4

Firstaid - Skin (text)

In Section 7

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Storage Maximum °F Storage Maximum °C Handling (text) Storage (text) General Procedures (text)

In Section 8

Skin Protection (text) Work Hygienic Practices (text)

In Section 9

(Group Field) for Vapor Pressure (Group Field) for Vapor Pressure Density (Group Field) for Boiling Point (Group Field) for Freezing Point

In Section 11

Eye Effects (text) Skin Effects (text)

In Section 13

Disposal (text)

In Section 16

HMIS Health HMIS Protection NFPA Health

NFPA CODES

HEALTH: 1 FIRE: 0 REACTIVITY: 0

HMIS CODES

HEALTH: 1 FIRE: 0 REACTIVITY: 0 PROTECTION: A

MANUFACTURER DISCLAIMER:

IMPORTANT: This information is given without a warranty or guarantee. No suggestions for use are intended or shall be construed as a recommendation to infringe any existing patents or violate any Federal, State or local laws. Safe handling and use is the responsibility of the customer. Read the label before using this product. This information is true and accurate to the best of our knowledge.
