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# MATERIAL SAFETY DATA SHEET

## MSDS

**BT-925**

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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : BT-925  
General Use : Industrial Water Treatment  
Chemical Family : Halogenated Hydantoin

**DISTRIBUTOR :**

BIO-SOURCE, INC.  
P.O. Box 898  
Snellville, GA 30078  
770 / 978-1443

**24 HR. EMERGENCY NUMBER :**

CHEM - TEL : ( 800 ) 255 - 3924

EPA Registration Number : 5185-420

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### 2. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>CHEMICAL NAME :</u>                 | <u>Wt. %</u> | <u>CAS Registry #</u> |
|--|--------------|-----------------------|
| 1-bromo-3-chloro-5,5-dimethylhydantoin | 96           | 16079-88-2            |
| <u>COMMENTS :</u>                      | ( BCDMH )    | <u>EINECS #</u>       |
|  |              | 240-230-0             |

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### 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

**PHYSICAL APPEARANCE :**

White powder, granules or tablets with halogen odor.

**IMMEDIATE CONCERNS :**

**DANGER :** Highly Corrosive : Causes skin and eye damage. May be fatal if swallowed. Do not get in eyes, on skin or on clothing. Wear goggles or safety glasses and rubber gloves when handling this product. Irritating to nose and throat. Avoid breathing dust and fumes. Remove contaminated clothing and wash before reuse.

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### POTENTIAL HEALTH EFFECTS

#### EYES :

DANGER : Highly Corrosive. Causes eye damage. Do not get in eyes.

#### SKIN :

DANGER : Highly Corrosive. Causes skin damage. Do not get on skin.

#### INGESTION :

May be fatal if swallowed.

#### INHALATION :

Irritating to nose and throat. Avoid breathing dust or fumes.

#### MEDICAL CONDITIONS AGGRAVATED :

Existing dermatitis may be aggravated by exposure.

#### COMMENTS HEALTH

There are no known chronic hazards.

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## 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 : Brush off excess chemical and flush skin with cold water for at least 15 minutes. If irritation persists, 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.

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### 4. FIRST AID MEASURES, Continued

NOTES TO PHYSICIAN :

Probable mucosal damage may contraindicate the use of gastric lavage.

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### 5. FIRE FIGHTING MEASURES

GENERAL HAZARDS :

In large fires fueled by other materials, this product may smolder for prolonged periods emitting a dense black smoke.

Any spilled material should be considered contaminated. Neutralize to a non-oxidizing material for safe disposal. Material which appears undamaged except for being damp on the outside, should be opened and inspected immediately. If the material is damp, it should be neutralized to a non-oxidizing material for safe disposal.

EXTINGUISHING MEDIA :

In case of fire or smoke, call the fire department. Do not attempt to extinguish the fire without a self-contained breathing apparatus ( SCBA ). Do not let the fire burn. Flood with copius amounts of water. DO NOT use ABC or other dry chemical extinguishers since there is the potential for a violent reaction.

EXPLOSION HAZARDS :

A dust explosion severity determination was performed using the Hartman Dust Explosibility Bomb designed at the U.S. Bureau of Mines. The product was determined not to be ignitable.

FIRE FIGHTING PROCEDURES :

Fires fueled by other materials may release hydrogen bromide, bromine, hydrogen chloride or chlorine. Wear self-contained breathing apparatus. Ammonium phosphate ( ABC ) fire extinguishers should not be used.

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### 6. ACCIDENTAL RELEASE MEASURES

#### GENERAL PROCEDURES :

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED :**  
Using appropriate protective clothing and safety equipment, contain spilled material. Do not add water to spilled material. 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 use floor sweeping compounds to clean up spills. Do not close containers containing wet or damp material. Keep product out of sewers, water sheds and water systems. Do not contaminate water, food, or feed by storage, disposal or cleaning equipment. Dispose of according to local, state and federal regulations.

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### 7. HANDLING AND STORAGE

#### HANDLING :

**STRONG OXIDIZING AGENT :** Do not mix with other chemicals. Mix only with water. Never add water to product. Always add product to large quantities of water. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic matter or other chemicals will start a chemical reaction heat and generate heat, hazardous gas, possible fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well ventilated area. Flood area with large volumes of water.

#### STORAGE :

Keep this product in original closed container when not in use. Store in a cool, well ventilated area away from heat or open flame. Do not contaminate water, food or feed by storage or disposal or cleaning of equipment. Do not Do not store above 125 F ( 52 C ).

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### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE GUIDELINES :

OSHA HAZARDOUS COMPONENTS ( 29 CFR 1910.1200 ).

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#### EXPOSURE LIMITS FOR :

1-bromo-3-chloro-5,5-dimethylhydantoin

|     | OSHA PEL    |                | ACGIH TLV  |                | SUPPLIER OEL |                |
|-----|-------------|----------------|------------|----------------|--------------|----------------|
|     | <u>ppm</u>  | <u>mg / m3</u> | <u>ppm</u> | <u>mg / m3</u> | <u>ppm</u>   | <u>mg / m3</u> |
| 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 dust / vapors.

#### PERSONAL PROTECTIVE EQUIPMENT :

##### EYES AND FACE :

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

##### SKIN :

Wear rubber gloves when handling this product. Avoid contact with skin.

##### RESPIRATORY :

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

##### WORK HYGIENIC PRACTICES :

Remove and wash contaminated clothing before reuse.

##### OTHER USE PRECAUTIONS :

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

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### PHYSICAL STATE :

Solid

#### ODOR :

Faint halogen odor

#### APPEARANCE :

Powder, Granules or Tablets

#### COLOR :

White

#### pH :

3.5 ( 0.1 % solution in DI water )

#### THERMAL DECOMPOSITION :

293 C to 302 C

#### SOLUBILITY IN WATER :

0.15 g / 100 g water

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## 10. STABILITY AND REACTIVITY

### CONDITIONS TO AVOID :

High temperature. Poor ventilation. Contamination. Moisture / high humidity.

### STABILITY :

This product is stable under normal conditions.

### POLYMERIZATION :

Hazardous polymerization will not occur under normal conditions.

### HAZARDOUS DECOMPOSITION PRODUCTS :

Hydrogen bromide, bromine, hydrogen chloride, chlorine.

### INCOMPATIBLE MATERIALS :

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 cyanuric acid containing compounds, calcium hypochlorite and alkalis. Avoid contact with other chemicals.

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## 11. TOXICOLOGICAL INFORMATION

### ACUTE :

**EYES :** Toxicological studies indicate this product to be corrosive to eyes.

**DERMAL LD 50 :** The dermal LD 50 is greater than 2.0 g / kg ( rabbit ). The primary skin irritation index is 6.1 and the product is considered corrosive to skin.

**ORAL LD 50 :** 578 mg / kg ( rat ).

### CARCINOGENICITY :

This product is not listed as a carcinogen by IARC.

This product is not listed as a carcinogen by NPT.

This product is not listed as a carcinogen by OSHA.

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## 12. ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION :

This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans or their waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System ( NPDES ) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. for guidance, contact your State Water Board or Regional Office of the EPA.

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## 13. DISPOSAL CONSIDERATIONS

### DISPOSAL METHOD :

Pesticide wastes are toxic. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor.

Contact with incompatible materials could cause a reaction or fire.

### 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 :

TECHNICAL NAME :

PRIMARY HAZARD CLASS / DIVISION :

UN / NA NUMBER :

PACKING GROUP :

Oxidizing Solid, N.O.S.

Bromo-chloro-dimethylhydantoin

5.1

1479

II

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### **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.

**CLEAN WATER ACT :** Not listed.

**FIFRA : ( FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT )**  
This product is a registered pesticide.

**SDWA ( SAFE DRINKING WATER ACT ) :** Not Listed.

**CLEAN AIR ACT : 40 CFR PART 68 - RISK MANAGEMENT FOR CHEMICAL**  
**RELEASE PREVENTION :** Not Listed.

#### **STATE REGULATIONS**

##### **PROPOSITION 65 STATEMENT**

This product or its components are not listed on any Proposition 65 lists of carcinogens or reproductive toxicants.

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### 16. OTHER INFORMATION

REVISION SUMMARY

New MSDS

NFPA CODES

HEALTH : 3    FIRE : 1    REACTIVITY : 1

NFPA STORAGE CLASSIFICATION :

NFPA Oxidizer Class 2

HMIS CODES

HEALTH : 3    FIRE : 1    REACTIVITY : 1    PROTECTION : B

MANUFACTURER DISCLAIMER :

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