

5/24/05

ISO 15 CWT

# BIO-SOURCE, INC.

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## MATERIAL SAFETY DATA SHEET

### Section 1. PRODUCT IDENTIFICATION

PRODUCT NAME: ISO 15 CWT

CHEMICAL DESCRIPTION: Aqueous isothiazolinone solution  
PRODUCT CLASS: Microbiocide  
MSDS CODE: 0632-01-16-95

Emergency Phone No. :  
1-(800) 424-9300

### Section 2. INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS Number</u>	<u>% by Weight</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Magnesium nitrate	10377-60-3	1.75	None established	None established
5-Chloro-2-methyl-4-isothiazolin-3-one	26172-55-4	1.15	None established*	None established*
Magnesium chloride	7786-30-3	1.10	None established	None established
2-Methyl-4-isothiazolin-3-one	2682-20-4	0.35	None established*	None established*
Cupric nitrate	3251-23-8	0.16	TWA 1 mg/m <sup>3</sup> (copper dusts & mists)	TWA 1 mg/m <sup>3</sup> (copper dusts & mists)

\*The active ingredients, 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one, make up 1.5% of the product. See Section 8 for supplier recommended exposure limits for these ingredients.

### Section 3. HAZARDS IDENTIFICATION

\*\*\*\*\* EMERGENCY OVERVIEW \*\*\*\*\*

**DANGER!**  
May cause severe eye and skin damage.  
May be harmful if swallowed or if inhaled.  
May cause allergic skin reaction.

\*\*\*\*\*

PRIMARY ROUTES OF ENTRY: Inhalation, skin absorption, eye and skin contact, ingestion

TARGET ORGANS: Eye, skin

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MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No data available.

### POTENTIAL HEALTH EFFECTS:

**EYE CONTACT:** This product may cause irreversible eye damage upon contact depending on the length of exposure, solution concentration and first aid measures.

**SKIN CONTACT:** This product would be expected to produce severe irritation to the skin upon contact or possibly even burns. These effects may be delayed for hours. This product may produce an allergic skin reaction. The concentrated ingredients of this product are toxic by skin absorption so, prolonged or widespread skin contact should be avoided to prevent the absorption of harmful amounts of material.

**INGESTION:** Ingestion of this product may cause severe irritation or burns of the mucous membranes of the mouth, throat, esophagus and stomach.

**INHALATION:** Inhalation of product vapor or mist can cause irritation of the nose and throat.

### SUBCHRONIC, CHRONIC:

The product can cause allergic contact dermatitis.

### CARCINOGENICITY:

#### NTP:

\*No ingredients listed in this section\*

#### IARC:

\*No ingredients listed in this section\*

#### OSHA:

\*No ingredients listed in this section\*

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## Section 4. FIRST AID MEASURES

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**EYE CONTACT:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical aid immediately.

**SKIN CONTACT:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical aid immediately. Wash clothing before reuse. Do not take clothing home to be laundered. Discard contaminated shoes, belts and other articles made of leather.

**INGESTION:** If swallowed, do NOT induce vomiting. Give large quantities of water. Seek medical aid immediately. Never give anything by mouth to an unconscious person.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.

**INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical aid.

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## Section 5. FIRE-FIGHTING MEASURES

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FLASH POINT: > 200 °F

This product is not by definition a "flammable liquid" or a "combustible liquid".

LOWER FLAMMABLE LIMIT: Not applicable

UPPER FLAMMABLE LIMIT: Not applicable

AUTO-IGNITION TEMPERATURE: Not available

EXTINGUISHING MEDIA: Use extinguishing media appropriate for the surrounding fire.

FIRE-FIGHTING INSTRUCTIONS: Exercise caution when fighting any chemical fire. A self-contained breathing apparatus and protective clothing are essential. Use water spray to cool containers exposed to fire. Minimize exposure. DO NOT breathe fumes. Contain run-off.

FIRE & EXPLOSION HAZARDS: Product emits toxic gases under fire conditions.

DECOMPOSITION PRODUCTS: Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, hydrogen chloride gas, and oxides of nitrogen and sulfur.

NFPA RATINGS: Health = 3 Flammability = 0 Reactivity = 0 Special Hazard = None

Hazard rating scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

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## Section 6. ACCIDENTAL RELEASE MEASURES

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STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Appropriate personal protective equipment including chemical splash goggles, butyl rubber gloves, rubber overshoes, and a respirator (with organic vapor/acid gas cartridge and a prefilter) must be worn. Contain spill immediately with inert materials like sand or earth. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Decontaminate spill area with a solution of 10% sodium bisulfite in water. Rinse decontaminated solution to a chemical sewer after standing for 30 minutes. Do NOT add decontamination solution to the waste pail to deactivate the adsorbed product. Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

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## Section 7. HANDLING AND STORAGE

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HANDLING: It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not get in eyes, on skin or clothing. Avoid breathing vapor or mist. Use with adequate ventilation.

STORAGE: Do not contaminate water, food, or feed by storage. This product is corrosive to mild steel. Do not store or transport in unlined metal containers. Store in a well ventilated area between 32 °F (0 °C) and 131 °F (55 °C).

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### Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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#### PERSONAL PROTECTIVE EQUIPMENT:

**EYE/FACE PROTECTION:** Chemical splash goggles and face shield

**SKIN PROTECTION:** Chemical resistant gloves and protective clothing

(Gloves of butyl rubber or nitrile may provide protection against permeation. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use.)

**RESPIRATORY PROTECTION:** If airborne concentrations exceed published exposure limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements (29 CFR 1910.134).

**ENGINEERING CONTROLS:** Local exhaust ventilation may be required in addition to general room ventilation to maintain airborne concentrations below exposure limits.

**WORK PRACTICES:** Eye wash station and safety shower should be accessible in the immediate area of use. Take a shower at the end of work period.

**UNSATISFACTORY MATERIALS OF CONSTRUCTION:** This product should not be used with aluminum alloys.

**EXPOSURE LIMITS:** TWA 0.1 mg/m<sup>3</sup>, STEL 0.3 mg/m<sup>3</sup> (supplier recommendation for total isothiazolinone).

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### Section 9. PHYSICAL AND CHEMICAL PROPERTIES

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**BOILING POINT:** ~ 212 °F (~ 100 °C)

**SOLUBILITY IN WATER:** Complete

**VAPOR PRESSURE:** 0.1 mmHg (isothiazolinone)

**SPECIFIC GRAVITY:** 1.02 @ 25°C

**VAPOR DENSITY (air = 1):** 0.62 (estimate)

**pH:** 3 - 5 @ 25 °C

**%VOLATILE BY WEIGHT:** 95 - 96 (water)

**FREEZING POINT:** 27 °F (-3 °C)

**APPEARANCE AND ODOR:** Green liquid with mild inoffensive odor.

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### Section 10. STABILITY AND REACTIVITY

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**CHEMICAL STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** No specific information.

**INCOMPATIBILITY:** Oxidizing agents, reducing agents, amines, mercaptans, aluminum alloys.

**DECOMPOSITION PRODUCTS:** Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, hydrogen chloride gas, and oxides of nitrogen and sulfur.

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## Section 11. TOXICOLOGICAL INFORMATION

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### ON PRODUCT:

Product Oral LD<sub>50</sub> (rat): 3810 mg/kg

Product Dermal LD<sub>50</sub> (rabbit): > 5 g/kg

Product Inhalation LC<sub>50</sub> (rat): > 13.7 mg/l/4H (nominal vapor concentration). Inhalation toxicity tests were conducted with a solution containing 1.0% active.

Eye irritation: A 0.3% active solution is an eye irritant and a 0.06% active solution is a non-irritant.

Skin irritation: A 0.6% active solution is a severe irritant to the skin, a 0.3% active product is a moderate skin irritant, and a 0.06% active product is a non-irritant.

Skin sensitization: Human patch tests have demonstrated that the active material is a skin sensitizer even at low concentrations.

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## Section 12. ECOLOGICAL INFORMATION

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### ON PRODUCT:

Aquatic toxicity data (results based on a nominal concentration of active ingredients):

96 hr LC<sub>50</sub> (bluegill sunfish): 0.54 ppm

96 hr LC<sub>50</sub> (rainbow trout): 0.14 ppm

96 hr LC<sub>50</sub> (sheepshead minnow): 0.3 ppm

48 hr LC<sub>50</sub> (Daphnia magna): 0.13 ppm

### Environmental data:

This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other 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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## Section 13. DISPOSAL CONSIDERATIONS

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RCRA STATUS: Discarded product, as sold, would be considered a RCRA Hazardous Waste based on the characteristic of corrosivity. The EPA Hazardous Waste Number is D002.

DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, 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.

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## Section 14. TRANSPORT INFORMATION

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### DOT CLASSIFICATION:

Class/Division: 8

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (contains  
5-Chloro-2-methyl-4-isothiazolin-3-one)

Label: Corrosive

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Packing Group: II  
ID Number: UN 3265

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## Section 15. REGULATORY INFORMATION

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OSHA Hazard Communication Status: Hazardous

TSCA: Pesticides are exempted by TSCA (the Toxic Substances Control Act), under Section 3(2)(a)ii, from the provisions of the Act.

CERCLA reportable quantity of EPA hazardous substances in product:

<u>Chemical Name</u>	<u>RQ</u>
Cupric nitrate	100 lb

Product RQ: 62,500 lb (Notify EPA of product spills exceeding this amount.)

SARA TITLE III:

Section 302 Extremely Hazardous Substances:

<u>Chemical Name</u>	<u>CAS #</u>	<u>RQ</u>	<u>TPO</u>
There are no SARA 302 Extremely Hazardous Substances in this product.			

Section 311 and 312 Health and Physical Hazards:

Immediate [yes]	Delayed [yes]	Fire [no]	Pressure [no]	Reactivity [no]
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Section 313 Toxic Chemicals:

<u>Chemical Name</u>	<u>CAS #</u>	<u>% by Weight</u>
Magnesium nitrate	10377-60-3	1.75

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## Section 16. OTHER INFORMATION

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HMIS RATINGS: Health = 3 \* Flammability = 0 Reactivity = 0  
Personal Protective Equipment = X (to be specified by user depending on use conditions)

\*There are potential chronic health effects to consider.

Hazard rating scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

MSDS REVISION SUMMARY: Supersedes MSDS issued on 11/16/95. The MSDS has been changed in Sections 8 and 10.

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While this information and recommendations set forth herein are believed to be accurate as of the date hereof, BIO-SOURCE, INC. MAKES NO WARRANTY WITH RESPECT HERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

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