

Material Safety Data Sheet

BIOTROL-102



Product: BIOTROL-102

Date of Preparation: 10-31-2011

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: BIOTROL-102

Emergency Response No: (800) 255-3924 (Chemtel)

Manufacturer: U.S. Water Services

330 South Cleveland St
Cambridge, MN 55008

Section 2 - Composition/Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol	ACGIH PEL	OTHER
5-chloro-2-methyl-4-isothiazolin-3-one*	26172-55-4	1.11% wt	Not determined	None
2-methyl-4-isothiazolin-3-one*	2682-20-4	0.39% wt	Not determined	None
Cupric Nitrate	3251-23-8	<1.0% wt	Not determined	None

* Note-mfg. sugg. exp. limit:0.1 mg/m3 TWA;0.3mg/m3 STEL(total isothiazoline).

Section 3 - Hazards Identification

+ + + + Emergency Overview + + + +

HMIS

H 3 Serious Hazard
F 0 Minimal Hazard
R 0 Minimal Hazard
PPE D (Goggles, Gloves, Apron)

Potential Health Effects

Primary Entry Routes: Eye, Skin contact, and Ingestion.

Acute Effects: Corrosive, effects may be delayed for hours.

Inhalation: Harmful if inhaled

Eye: Corrosive to eyes, causes irreversible eye damage.

Skin: Corrosive to skin, causes skin burns. Can cause allergic dermatitis.

Ingestion: Harmful if swallowed.

Carcinogenicity: IARC, NTP, and OSHA do not list this product or its components as a carcinogen.

Medical Conditions Aggravated by Long-term Exposure: Exposure may cause allergic contact dermatitis

Chronic Effects: None

Section 4 - First Aid Measures

Inhalation: If inhaled and irritation or difficulty breathing occurs, remove to fresh air. Seek medical aid if irritation persists.

Eye Contact: Immediately flush eyes with plenty of water, lifting upper and lower eyelids occasionally, for at least 15 minutes. Get prompt medical attention.

Skin Contact: In case of contact, flush skin with plenty of water and remove contaminated clothing. Seek medical aid if irritation persists. Wash clothing before reuse.

Ingestion: If swallowed, dilute by giving 2 glasses of water to drink and call a physician. Never give anything by mouth to an unconscious person.

Section 5 - Fire-Fighting Measures

Flash Point: Not flammable

Flash Point Method: Pensky Martin Closed Cup

Burning Rate: Not applicable

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Auto-ignition Temperature: Not determined

LEL: Not determined

UEL: Not determined

Extinguishing Media: Non-combustible

Unusual Fire or Explosion Hazards: Avoid exposure to fumes and vapors from a fire, can possibly include sulfur dioxide and hydrogen chloride and oxides of sulfur.

Hazardous Combustion Products: See above

Fire-Fighting Instructions: Wear breathing apparatus and full protective clothing. Use water spray to cool fire-exposed containers.

Contain run-off.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill/Leak Procedures: Follow all Federal, State and local regulations.

Small Spills: Wear protective clothing, splash proof goggles and impervious overshoes. Remove contaminated clothing promptly. Launder before reuse. Wash skin with soap and water. Keep spills out of municipal sewers and open bodies of water. Dike and absorb spill with inert material (Dry earth, sand). Shovel all contaminated solids-diking material absorbent and soil into corrosion proof, DOT approved containers. Seal Drums

Large Spills: See above

Containment: See above

Cleanup: For discard, this is a hazardous waste: RCRA # D002. Reportable Quantity 100 lbs. (Cercla Superfund Sec 103) Land fill contaminated solids in sealed drums in accordance with all applicable local, state and federal regulations.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120)

Section 7 - Handling and Storage

Handling Precautions: Use the recommended safety controls and personal protective equipment as outlined. Fully review all data before handling of the material itself. Avoid contact with skin or eyes. Avoid breathing dust or mist. Keep from contact with clothing and other combustible materials. Observe good personal hygiene and housekeeping practices.

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in closed container away from incompatible materials, heat and sources of ignition. Protect from extreme cold.

Regulatory Requirements: Store materials according to all local, state and federal guidelines that are established for corrosive materials.

Section 8 - Exposure Controls/Personal Protection

Engineering Controls: No specifications.

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls: No specifications.

Respiratory Protection: Typical use of this material does not result in workplace exposures that exceed the exposure limits listed in the Exposure Limit Information Section. For those special workplace conditions where the listed exposure limits are exceeded, a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. For concentrations up to 10 times the exposure limit, wear a properly fitted NIOSH approved (or equivalent) half-mask or full facepiece air purifying respirator equipped with organic vapor cartridges and N95 filters. If oil mist is present, use R95 or P95 filters. For those unlikely situations where exposure may greatly exceed the listed exposure limits (i.e. greater than 10-fold), or in any emergency situation, wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode or a full facepiece airline respirator in the pressure demand mode with emergency escape provision.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

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Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section – 9 Physical and Chemical Properties

Boiling Point: 212 deg F

Appearance and Odor: Pale yellow to green liquid, slight odor

Vapor Pressure: 17 mm Hg

Vapor Density (Air=1): 0.62

Specific Gravity (H₂O=1, at 4°C): 1.03

Water Solubility: Complete

Other Solubilities: Not tested for the blend

pH: 2 to 4

Water Reactive: No

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions. However, avoid temperature extremes.

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities: Oxidizing agents, reducing agents, amines, mercaptans

Conditions to Avoid: Extreme temperatures

Hazardous Decomposition Products: Hydrogen Chloride and oxides of sulfure

Section 11 - Toxicological Information

Acute Toxicity

See Section 3

Chronic Effects: No chronic effects are known to be attributable for this product.

Mutagenicity: No mutagenic effects are known to be applicable for the formulation components of this product.

**See NIOSH, RTECS, for additional toxicity data.

Carcinogenicity: No carcinogenic effects are known to be applicable for the formulation components of this product.

Teratogenicity: No studies have been performed.

Section 12 - Ecological Information

Eco-toxicity:

SPECIES	ACUTE LC50 24 Hr	ACUTE LC50 48 Hr	ACUTE LC50 72 Hr	ACUTE LC50 96 Hr	ACUTE NOEC	ACUTE LOEC
Ceriodaphnia (Water Flea)	6.0 mg/L	3.6 mg/L	-----	-----	2.2 mg/L 48 Hr	3.6 mg/L 48 Hr
Fathead Minnow	>10 mg/L	8.2 mg/L	7.2 mg/L	6.5 mg/L	3.6 mg/L 96 Hr	6 mg/L 96 Hr

Environmental Fate: Ground and/or water

Environmental Degradation: N/A

Soil Absorption/Mobility: No studies have been conducted for this blend

Section 13 - Disposal Considerations

Disposal: Review federal, state and local government requirements prior to disposal.

Disposal Regulatory Requirements: Follow all Federal, State and local regulations.

Container Cleaning and Disposal: Review federal, state and local government requirements prior to disposal.

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Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S. (Contains:5-chloro-2-methyl-4-isothiazolin-3-one)
Hazard Class: 8
ID No.: UN 3265 PG II
Label Code: Corrosive
HMIS Label Code: 300 D
Shipping Notations: None

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Classification (40 CFR 261.22): Corrosivity
RCRA Hazardous Waste Number (40 CFR 261.22): D002

CERCLA Reportable Quantity (RQ): 10,000 lbs

SARA TITLE III -CERCLA LIST: This product contains the following CERCLA Listed hazardous substance: Cupric Nitrate CAS# 3251-23-8 (< 1.0%).

SARA TITLE III-TOXIC CHEMICAL LIST: This product does not contain chemicals subject to routine annual toxic chemical release reporting

SARA TITLE III-EXTREMELY HAZARDOUS SUBSTANCE: This product does not contain any extremely hazardous substances subject to the emergency planning requirements.

Section 16 - Other Information

Prepared By: U S Water Services

Revision Notes:

Additional Hazard Rating Systems:

Disclaimer:

USERS RESPONSIBILITY

The information and recommendations contained herein cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

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