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## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES

FLASHPOINT: None

METHOD USED: Not applicable

FLAMMABLE LIMITS:

LFL: Not applicable

UFL: Not applicable

EXTINGUISHING MEDIA: Water-based product. Non-flammable

FIRE & EXPLOSION HAZARDS: None.

SPECIAL FIRE FIGHTING PROCEDURES: None (non-flammable)

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## 6. ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Review current local, state and federal laws, codes, statutes, and regulations to determine appropriate agencies to be notified, and the conditions under which they are to be notified. Wear recommended protective equipment. Recover as much free liquid as possible and collect in acid-resistant container. Use absorbent to pick up residue. Avoid discharging liquid directly into a sewer or surface waters. CERCLA Reportable Quantity is 10 lb. for Selenious Acid (approximately 48 gallons of product) and 10 lb. for Cupric sulfate (approximately 49 gallons of product).

**WASTE DISPOSAL METHOD:** Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate disposal method for the ingredients listed in Section 2. Waste and its solutions are assigned EPA Hazardous Waste Number D010. The wastes can be disposed of through a licensed waste disposal company.

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**7. HANDLING AND STORAGE:** Store in acid-resistant containers. Keep containers covered when not in use. Avoid storing with cyanides, water-reactive substances and strong reducing agents. Wear protective equipment when handling product.

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## 8. SPECIAL PROTECTION INFORMATION

**NOTE:** The product itself does not produce hazardous fumes or vapors. Consequently, no ventilation or respiratory protection is required under normal operating conditions. However, if the product is applied in a way that produces mists or aerosols, then appropriate ventilation and respiratory protection is recommended.

RESPIRATORY PROTECTION (type): Air-supplied respirator or self-contained breathing apparatus

PROTECTIVE GLOVES (type): Rubber or neoprene

LOCAL EXHAUST VENTILATION (rate): To keep exposure below TLV

EYE PROTECTION: (type): Safety glasses, goggles or face shield

MECHANICAL VENTILATION (rate): No information

OTHER PROTECTIVE EQUIPMENT: Chemical resistant apron

SPECIAL VENTILATION: Equipment for containment and collection of mists if spray application is used

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: >212°F

SPECIFIC GRAVITY: (Water = 1): 1.12

VAPOR PRESSURE: No data

VOLATILE BY VOLUME: None (except water)

VAPOR DENSITY: (Air = 1): <1

EVAPORATION RATE: (Ethyl Ether = 1) <1

SOLUBILITY IN WATER: Complete

APPEARANCE & ODOR: Odorless blue liquid

pH (100%) : 1.1

pH (20%) : 1.5

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## 10. STABILITY AND REACTIVITY

STABILITY: Stable.

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY (materials to avoid): Cyanides, water-reactive substances, most metals, strong reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Reaction with organics and strong reducing agents can produce organoselenides and hydrogen selenide.

HAZARDOUS POLYMERIZATION: Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

1. The Registry of Toxic Effects of Chemical Substances cites experimental evidence toxic effects of selenites and various copper and zinc compounds. The implications of the experimental data for human exposure is uncertain.
  2. With regards to carcinogenesis in animals, the status of selenium is not established according to IARC (the International Agency for Research on Cancer). Other animal or epidemiological studies suggest that selenium may have anti-carcinogenic effects.
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## 12. ECOLOGICAL INFORMATION

Information not available.

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## 13. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and disposal of hazardous waste must be carried out by a licensed facility or waste hauler.

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## 14. TRANSPORT INFORMATION

### D.O.T. HAZARDOUS MATERIALS DESCRIPTION AND PROPER SHIPPING NAME:

(49CFR 172.101): Corrosive Liquid, Acidic, Inorganic, N.O.S. 8/UN3264/P.G. III (Selenious & Phosphoric Acid). Exceptions: 49CFR 173.154. Reportable Quantity (Selenious Acid & Cupric Sulfate) at 48 gallons; Marine Pollutant (Cupric Sulfate)

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## 15. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION RULE 29 CFR 1910.1200: Refer to Section 2.

TSCA (TOXIC SUBSTANCES CONTROL ACT): Components of this product are listed on the TSCA Inventory.

CERCLA (Comprehensive Response compensation and Liability Act, 40 CFR 117, 302:

Refer to Section 6 (Accidental Release Measures).

SARA TITLE III (Superfund Amendments and Authorization Act):

Section 313 Reportable Ingredients: Selenious Acid, Cupric Sulfate and Phosphoric Acid.

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**16. OTHER INFORMATION**

NATIONAL FIRE PROTECTION ASSOCIATION CODES (NFPA):

HEALTH: 2                      FLAMMABILITY: 0  
REACTIVITY: 0

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS):

HEALTH: 2                      FLAMMABILITY: 0  
REACTIVITY: 0      PERSONAL PROTECTION: C

The data here is for hazard communication to our employees, our customers and their employees, and authorized regulatory agencies. For the intended purpose, this MSDS (Material Safety data Sheet) may be duplicated or the data transcribed to an alternative form.

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Changed 08-02-04

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**FOR ASSISTANCE WITH PLACING ORDERS:**

- Product Pricing / Payment Terms
- Shipping and Tracing of Shipments
- Sales Rep Locations

Please call our Customer Service Desk at (952) 937-7931, or 1-800-328-6156; Fax #: (952) 937-7979

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