

MATERIAL SAFETY DATA SHEET

MICRO CLEAN CONCENTRATE

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Issue Date: 01/06

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product

MICRO CLEAN CONCENTRATE

Common Name: Liquid water treating formula.

Chemical Description:

TSCA/CAS No.: This product is a mixture. The primary CAS No. is 6419-19-8.

Manufactured For

Monterey AgResources

P. O. Box 35000

Fresno, CA 93745-5000

Emergency Phone Numbers

Emergency Telephone: DAYS: (559) 499-2100 EVES: (559) 994-9144

CHEMTREC (24-Hour Emergency Number): (800) 424-9300

EPA National Response Center: (800) 424-8802

SECTION 2. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ (lbs)
Organo Phosphonic Acid	6419-19-8	18.0	N.A.*	N.P.*
Cupric Sulfate	7758-98-7	0.56	N.A.	10 lbs.

* N.A. - Not Available.

* N.P. - Not Pertinent.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Pale, blue liquid with no odor. Corrosive to eyes and skin. If ingested, **do not induce vomiting**. Decomposition above 200°C will liberate toxic phosphine fumes. Contact with strong alkalis will result in violent reactions evolving steam. D.O.T. Corrosive liquid.

HEALTH: 2 REACTIVITY: 1 FLAMMABILITY: 0 ENVIRONMENT: 1
(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

SECTION 4. FIRST AID

Eyes: Flush with water for at least 15 minutes. Seek medical attention immediately.

Skin: Flush with water for at least 15 minutes. Seek medical attention immediately.

Ingestion: Drink 2 glasses of water or milk to dilute. **Do not induce vomiting**. Get medical attention.

Inhalation: Move to fresh air. If breathing becomes difficult, call a physician.

SECTION 5. FIRE AND EXPLOSION HAZARDS

Flash Point:	>200°F.
Test Method:	TCC
LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not pertinent.
Flammability Classification:	Noncombustible.
Known Hazardous Products of Combustion:	Not known.
Properties that Initiate/Contribute to Intensity of Fire:	Not known.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential For Release of Flammable Vapors:	Not known.
Unusual Fire & Explosion Hazards:	Decomposition above 200°C liberates toxic phosphine fumes. Contact with strong alkalis will result in violent reactions evolving steam. Contact with metal salts of sulfides and sulfites may release toxic fumes.
Extinguishing Media:	Does not burn.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and complete personal protective equipment. Cool storage drums and exposed structures with water spray. Avoid smoke inhalation. Contain any liquid runoff.

SECTION 6. SPILLS AND LEAKS

Containment:	Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Absorb onto absorbent material and package for disposal at an appropriate waste disposal facility.
Evacuation:	Not necessary.

SECTION 7. STORAGE AND HANDLING

Storage:	Store in plastic or stainless steel container in a cool, well-ventilated, dry place at temperatures above 40°F. Do not store near food or feeds. Do not stack pallets more than two (2) high.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	Harmful if swallowed. Causes eye and skin irritation. In case of contact, immediately flush eyes or skin with plenty of water and contact a physician.

SECTION 8. PERSONAL PROTECTIVE EQUIPMENT

Eyes: Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling.

Skin: Impervious gloves and clothes.

Respiratory: Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved dust/mist respirator (such as 3M #8710).

Ventilation: Recommended but no TLV established.

SECTION 9. PHYSICAL AND CHEMICAL DATA

Appearance: Pale, blue liquid.

Odor: No odor.

pH: 1.7

Vapor Pressure: Not established.

Vapor Density (Air=1): Not available.

Boiling Point: 108°C (226°F).

Freezing Point: Not available.

Water Solubility: Miscible.

Density: 9.16 lbs./gal.

Evaporation Rate: Not available

Viscosity: Not available.

% Volatile: Not available.

Octanol/Water Partition Coefficient: Not available.

Saturated Vapor Concentration: Not available.

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable.

Conditions To Avoid: Temperatures over 200°C.

Incompatibility: Avoid strong oxidizers, strong alkalies, amines, metal salts of sulfides and sulfites.

Hazardous Decomposition Products: Phosphine, Carbon monoxide, CO₂ and oxides of nitrogen.

Hazardous Polymerization: Will not occur.

SECTION 11. POTENTIAL HEALTH EFFECTSAcute Effects:

Eyes: Severe irritant. Causes redness and/or burning.

Skin: Severe irritant, especially from prolonged exposure. Causes redness, drying and cracking.

Ingestion: Causes stomach cramps and/or nausea.

Inhalation: None expected but aerosol mist may cause mild irritation of nasal mucous membranes.

Subchronic Effects: None known.

Chronic Effects: None known.

SECTION 12. ECOLOGICAL INFORMATION

Algal/Lemna Growth Inhibition:	Not known.
Toxicity to Fish and Invertebrates:	Not known.
Toxicity to Plants:	Not known.
Toxicity in Birds:	Not known.

SECTION 13. DISPOSAL

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents in accordance with state and local regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal. Do not discharge.

SECTION 14. TRANSPORTATION

D.O.T.:	Corrosive Liquid, N.O.S. (Organo Phosphonic Acid), 8, UN 1760, PG III. (Placards Req. For Loads More Than 1,001 Lbs.) ERG #154.
Other Shipping Description:	Compounds, Water Treating, Liquid. (NMFC Item 50313, LTL Class 65)

SECTION 15. REGULATORY INFORMATION

CERCLA: Cupric sulfate is listed as a priority pollutant under the Clean Water Act and, as such, falls under the CERCLA spill reporting requirements of 40 CFR 302. Spills of more than 200 gallons of Micro Clean Concentrate will exceed the RQ for cupric sulfate and must be reported.

SARA TITLE III, Section 313 Toxic Chemicals: None.

PROPOSITION 65 (CA): None.

SECTION 16. OTHER

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