

Product Name: POLYAMINE COPPER**Product ID # 04****Section I MANUFACTURER'S INFORMATION**

Manufacturer's Name & Address

Verdesian Life Sciences
12222 Ave 352
Visalia, CA 93291

Emergency Telephone Number:

1-800-424-9300

Number for Information:

1-800-868-6446

Date Prepared:

November 17, 2000

Date Reviewed:

June 1, 2010

Section II PRODUCT IDENTIFICATION

Product Name:	Copper Amino Acid Complex		
Chemical Family::	Copper Compounds	Health	-2
Formula:	CUS04 5H20	Flammability	-0 None
Formula WT.:	249-68	Reactivity	-0 None
CAS No.:	7758-99-8	Contact	-2 Moderate
NIOSH/RTECS No.:	GL8900000		

U.S. PRECAUTIONARY STATEMENT

WARNING: Causes irritation. Harmful if swallowed. Avoid contact with eyes, skin, clothing. Keep in tightly closed container. Use with adequate ventilation. Wash thoroughly after handling.

INTERNATIONAL STATEMENT

Harmful if swallowed. Irritating to respiratory system and skin. After contact with skin, wash immediately with plenty of soap and water. If irritation occurs, get medical attention.

Section III COMPONENTS

Components	CASNo.	Weight%	OSHA/Pel	ACGIH/TLV
Copper Sulfate Pentahydrate	7758-99-8	8	1 MG/M3	1MG/M3

Copper Amino Acid THRESHOLD LIMIT VALUE not established

Section IV PHYSICAL DATA

Boiling Point:	100° C
Melting Point:	653° C (1207°F) Decomposes (at 760 MM HG)
Vapor Pressure (MMGH):	N/A
Vapor Density (AIR=1):	N/A (AT 760 MM HG)
Specific Gravity:	N/A
Evaporation Rate:	N/A
Solubility (H2O):	Appreciable (10%)
% Volatile by Volume:	0 (21 C)
pH:	2.56
Physical State:	Liquid
Coefficient water/oil distribution:	N/A
Appearance & Odor:	Dark Blue Liquid

Section V FIRE AND EXPLOSION DATA

Flash Point (closed cup):	N/A	Auto Ignition Temperature	N/A
Flammable Limits:	Upper - N/A	Lower - N/A	

Fire Extinguishing Media appropriate for surrounding fire.

Special Fire Fighting Procedures:

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Unusual Fire & Explosion Hazards: Decomposes at melting point

Toxic Gases Produced: Sulfur Dioxide

Explosion Data-Sensitivity to mechanical impact: None Identified

Explosion Data-Sensitivity to static discharge: None Identified

Section VI HEALTH AND HAZARD DATA

Threshold limit value (TLV/TWA): 1 mg/m3

TLV is for Copper, dusts and mists, as CU.

Short-term exposure limit (stel): Not Established.

Health and Hazard Data continued.....

Permissible exposure limit (pel): 1 mg/m3

Toxicity of Components Oral Rat LD50 for Cupric Sulfate, 5-Hydrate 300mg/kg Intrapertoneal Mouse LD5 for Cupric Sulfate, 5 Hydrate 33mg/kg Carcinogenicity: NTP: No IARC: No Z List: No OSHA Reg: No
 Carcinogenicity: None Identified.
 Productive effects: None Identified.
 Effects of overexposure: None Identified.
 Inhalation: Irritation of the upper respiratory tract, irritation of the mucus membranes.
 Skin contact: Irritation
 Eye contact: Irritation
 Skin absorption: None identified.
 Ingestion: Nausea, vomiting, diarrhea, abdominal distress.
 Chronic effects: Blood damage
 Target organs: Eyes, skin and blood.
 Medical conditions generally aggravated by exposure: None Identified.
 Primary routes of entry: Inhalation, ingestion, skin contact, and eye contact.

EMERGENCY FIRST AID PROCEDURES

Ingestion: Call physician. If swallowed, if conscious give large amounts of water. Induce vomiting.
 Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
 Skin contact: In case of contact, flush skin with water.
 Eye contact: In case of eye contact, immediately flush with plenty of water for at least fifteen minutes.

SARA/TITLE III HAZARD CATEGORIES AND LISTS

Acute:	Yes	Chronic:	Yes	Flammability:	No
Pressure:	No	Reactivity:	No	Extremely hazardous substance:	No
TSCA Inventory:	Yes	Cercla Hazardous Substance:	yes	Sara 313 Toxic Chemicals:	Yes
Contains Cupric Sulfate(RQ=5lbs.)		Contains Copper	-C15		

Section VII REACTIVITY DATA

Stability: Stable
 Hazardous Polymerization: Will not occur
 Conditions to avoid: Heat
 Incompatibles: Strong reducing agents, strong oxidizing agents magnesium.
 Decomposition Products: Oxides of Sulfur

Section VIII SPILL & DISPOSAL PROCEDURES

Steps to be taken in the event of a spill or discharge:
 Wear self-contained breathing apparatus and full protective clothing. With clean shovel, carefully place material into clean, dry container and cover, remove from area.
 Flush spill area with water.
 Disposal procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

Section IX TRANSPORTATION INFORMATION

Special Shipping Notes: This product is not regulated under national or international transport regulations.

OSHA standard 29 CFR 1910. 1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material request that you, and it is your legal duty to, make all information in this material safety data sheet available to your employees.

Prepared By: David Bergevin

Date: November 17, 2000

Revised: January 4, 2008 by Kyle Hartmeier

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