



Material Safety Data Sheet Cupriethylenediamine, 1.0 M

Section 1 - Chemical Product and Company Identification

MSDS Name:

Cupriethylenediamine, 1.0 M

Catalog Numbers:

LC13543

Synonyms:

None

Company Identification:

LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
13426-91-0	Cupriethylenediamine	22.5
7732-18-5	Water	balance

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Dark blue solution*

Caution. Corrosive. May cause irritation or burns to eyes, skin, and gastrointestinal tract. Causes respiratory tract irritation and possible sensitization. Harmful if swallowed. Ingestion may cause central nervous system effects.

Target Organs: *Eyes, skin, respiratory and central nervous systems, liver and kidneys*

Potential Health Effects

Eye:

May cause eye irritation, characterized by redness, watering, and itching.

Skin:

May cause skin irritation or burns, itching, scaling, reddening, or blistering.

Ingestion:

Harmful if swallowed. Causes irritation of the digestive tract (mouth, throat, stomach) with sore throat, thirst, salivation, metallic taste, dizziness, weakness, severe abdominal pain, nausea, vomiting, diarrhea, ulceration and inflammation of the upper alimentary tract, and possible tissue damage/burns and perforation of the esophagus or stomach. Aspiration may occur during ingestion



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or vomiting, resulting in lung injury. May also cause central nervous system depression, paralysis, convulsions, and may affect the liver and kidneys.

Inhalation:

Inhalation of mist or vapor irritates the respiratory tract (nose, throat, lungs), and mucous membranes causing coughing, wheezing, and /or shortness of breath or choking. May cause headache, dizziness, weakness, nausea, vomiting, and lung edema. May cause asthma-like allergy.

Chronic:

Repeated exposure may cause allergic skin reaction (dermatitis), thickening of the skin and a greenish color to the skin and hair. Repeated inhalation may cause asthma-like allergy. Future exposure may cause asthma attacks with shortness of breath, wheezing, cough, and/or chest-tightness. Repeated exposure may also cause atrophy of the inner lining of the nose and may cause sores in the nose. Repeated or prolonged ingestion copper/copper compounds may affect the liver and kidneys.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

Substance is not combustible; use appropriate extinguishing media for surrounding fire.

Autoignition Temperature:

Not available.

Flash Point:

Not available.

NFPA Rating:

Not available.

Explosion Limits:

Lower: N/A Upper: N/A



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable container (plastic or glass) for later disposal. Isolate and ventilate spill area. Keep out of sewers/drains.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

Storage:

Keep away from heat, sparks, and flame. Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Cupriethylenediamine	1 mg/m ³ TLV (as Cu)	1 mg/m ³ (as Cu)	1 mg/m ³ PEL (as Cu)
Water	None listed	None listed	None listed

OSHA Vacated PELs:**Personal Protective Equipment****Eyes:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: Dark blue
Odor: Slight ammoniacal
pH: 12



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Vapor Pressure:	Not available
Vapor Density:	0.62 (Air = 1)
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	>100 C
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	1.1
Molecular Formula:	Not available
Molecular Weight:	Not available

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, exposure to air and CO₂.

Incompatibilities with Other Materials:

Combustible materials, acids, metals. Dissolves cotton, wood, and other cellulosic materials.

Hazardous Decomposition Products:

Oxides of carbon, copper fume, copper oxides.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

KH8660000

LD50/LC50:

CAS# 13426-91-0:

Oral, rat: LD50 = 750 mg/kg

Dermal, rat: LD50 = 8000 mg/kg

CAS#7732-18-5:

Oral, rat: LD50 = >90 mL/kg

Carcinogenicity:

Not available.

Epidemiology:

Not available.

Teratogenicity:

Not available.

Reproductive:

Not available.

Mutagenicity:

Not available.

Neurotoxicity:

Not available.



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Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Cupriethylenediamine solution
Hazard Class: 8 (6.1)
UN Number: UN1761
Packing Group: PGII

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 13426-91-0 is not listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

SARA Reportable Quantities (RQ):

None of the chemicals in this product have an RQ.

CERCLA/SARA Section 313:

This material contains Cupriethylenediamine (listed as copper compounds, nos), 22.5%, (CAS 13426-91-0), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

US State

State Right to Know:

CAS# 13426-91-0 is listed on the following state right to know lists: California (listed as Copper compounds, nos), and Pennsylvania (listed as Copper compounds, nos).

California Regulations:

None.

European/International Regulations

Canadian DSL/NDSL:

CAS# 13426-91-0 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 13426-91-0 is listed on the Canadian Ingredient Disclosure List.



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CAS# 7732-18-5 is not listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: May 27, 2008

Revision Date: None

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