



**COPPER (II) ETHYLENEDIAMINE  
COMPLEX, 1M SOLUTION IN WATER  
CAS No 14552-35-3**

**MATERIAL SAFETY DATA SHEET  
SDS/MSDS**

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product name : Copper (II) Ethylenediamine Complex, 1M Solution In Water

CAS-No. : 14552-35-3

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
Ansari Road Daryaganj  
New Delhi-110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Skin corrosion/irritation, H314  
Category 1

Full text of classification categories and H statements : see section 16

**Adverse physicochemical, human health and environmental effects**

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) : P280 - Wear eye protection, protective clothing, face protection, protective gloves  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a doctor, a POISON CENTER

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS No) 7732-18-5 (EC no) 231-791-2	78 - 80	Not classified
Copper(2+)bis(1,2-ethanediamineN,N')-, dihydroxide		20 - 22	Not classified

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Wash with plenty of soap and water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get immediate medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes severe skin burns and eye damage.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, dry sand, or alcohol-resistant foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1 For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2 For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Do not allow to enter drains or water courses. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 6.4. Reference to other sections

No additional information available

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Keep cool.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

Hand protection	: protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Dark blue.
Odour	: odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: Water Soluble
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No additional information available

### 10.2 Chemical stability

Stable under normal conditions of use.

### 10.3 Possibility of hazardous reactions

No additional information available

### 10.4 Conditions to avoid

Direct sunlight. Air contact. Overheating.

### 10.5 Incompatible materials

Oxidizing agent.

### 10.6 Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Serious eye damage, category 1, implicit

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1 Toxicity

No additional information available

### 12.2 Persistence and degradability

No additional information available

### 12.3 Bioaccumulative potential

No additional information available

### 12.4 Mobility in soil

No additional information available

### 12.5 Results of PBT and vPvB assessment

No additional information available

### 12.6 Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

No additional information available

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1 UN number

UN-No. (ADR)	: 1761
UN-No. (IMDG)	: 1761
UN-No.(IATA)	: 1761
UN-No.(ADN)	: Not regulated
UN-No. (RID)	: Not regulated

### 14.2 UN proper shipping name

Proper Shipping Name (ADR)	: CUPRIETHYLENEDIAMINE SOLUTION
Proper Shipping Name (IMDG)	: CUPRIETHYLENEDIAMINE SOLUTION
Proper Shipping Name (IATA)	: CUPRIETHYLENEDIAMINE SOLUTION
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated
Transport document description (ADR)	: UN 1761 CUPRIETHYLENEDIAMINE SOLUTION, 8 (6.1), II, (E)
Transport document description (IMDG)	: UN 1761 CUPRIETHYLENEDIAMINE SOLUTION, 8 (6.1), II, MARINE POLLUTANT
Transport document description (IATA)	: UN 1761 CUPRIETHYLENEDIAMINE SOLUTION, 8 (6.1), II

### 14.3 Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 8 (6.1)
Danger labels (ADR)	: 8, 6.1



#### IMDG

Transport hazard class(es) (IMDG)	: 8 (6.1)
Danger labels (IMDG)	: 8, 6.1



**IATA**

Transport hazard class(es) (IATA) : 8 (6.1)  
 Hazard labels (IATA) : 8, 6.1

**ADN**

Transport hazard class(es) (ADN) : Not regulated

**RID**

Transport hazard class(es) (RID) : Not regulated

**14.4 Packing group**

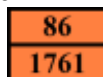
Packing group (ADR) : II  
 Packing group (IMDG) : II  
 Packing group (IATA) : II  
 Packing group (ADN) : Not regulated  
 Packing group (RID) : Not regulated

**14.5 Environmental hazards**

Dangerous for the environment : No  
 Marine pollutant : Yes (IMDG only)  
 Other information : No supplementary information available

**14.6 Special precautions for user****- Overland transport**

Classification code (ADR) : CT1  
 Limited quantities (ADR) : 1L  
 Excepted quantities (ADR) : E2  
 Packing instructions (ADR) : P001, IBC02  
 Mixed packing provisions (ADR) : MP15  
 Portable tank and bulk container instructions (ADR) : T7  
 Portable tank and bulk container special provisions (ADR) : TP2  
 Tank code (ADR) : L4BN  
 Vehicle for tank carriage : AT  
 Transport category (ADR) : 2  
 Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28  
 Hazard identification number (Kemler No.) : 86  
 Orange plates :



Tunnel restriction code (ADR) : E  
EAC code : 2X

#### **- Transport by sea**

Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP2  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Stowage category (IMDG) : A

#### **- Air transport**

PCA Excepted quantities (IATA) : E2  
PCA Limited quantities (IATA) : Y840  
PCA limited quantity max net quantity (IATA) : 0.5L  
PCA packing instructions (IATA) : 851  
PCA max net quantity (IATA) : 1L  
CAO packing instructions (IATA) : 855  
CAO max net quantity (IATA) : 30L  
Special provision (IATA) : A3  
ERG code (IATA) : 8P

#### **- Inland waterway transport**

Not regulated

#### **- Rail transport**

Not regulated

### **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## **SECTION 15: Regulatory information**

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

#### **15.1.1 EU-Regulations**

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### **15.1.2 National regulations**

##### **Germany**

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)



## Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2 Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of H- and EUH-phrases:

Skin Corr. 1	Skin corrosion/irritation, Category 1
H314	Causes severe skin burns and eye damage

### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.