

**COPPER OXIDE WIRE  
CAS NO 1317-38-0****MATERIAL SAFETY DATA SHEET  
SDS/MSDS****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : Copper Oxide WIRE

CAS-No. : 1317-38-0

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

Identified uses : Laboratory chemicals, Industrial &amp; 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**

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008**

Pictogram

GHS09  
Warning

Signal word

Hazard statement(s)

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273

Avoid release to the environment.

Supplemental Hazard  
Statements

none

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Cupric oxide

Formula : CuO

Molecular weight : 79.54 g/mol

CAS-No. : 1317-38-0

EC-No. : 215-269-1

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component           |           | Classification               | Concentration |
|---------------------|-----------|------------------------------|---------------|
| <b>Copper oxide</b> |           |                              |               |
| CAS-No.             | 1317-38-0 | Aquatic Acute 1; Aquatic     | <= 100 %      |
| EC-No.              | 215-269-1 | Chronic 3; H400, H412        |               |
|                     |           | M-Factor - Aquatic Acute: 10 |               |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Copper oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## **SECTION 6: Accidental release measures**

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non Combustible Solids

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

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### **Body Protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |                                                 |                                                          |
|-------------------------------------------------|----------------------------------------------------------|
| a) Appearance                                   | Form: Wire<br>Colour: black                              |
| b) Odour                                        | No data available                                        |
| c) Odour Threshold                              | No data available                                        |
| d) pH                                           | No data available                                        |
| e) Melting point/freezing point                 | Melting point/range: 1,336 °C                            |
| f) Initial boiling point and boiling range      | No data available                                        |
| g) Flash point                                  | Not applicable                                           |
| h) Evaporation rate                             | No data available                                        |
| i) Flammability (solid, gas)                    | No data available                                        |
| j) Upper/lower flammability or explosive limits | No data available                                        |
| k) Vapour pressure                              | No data available                                        |
| l) Vapour density                               | No data available                                        |
| m) Relative density                             | 6.320 g/cm <sup>3</sup>                                  |
| n) Water solubility                             | 0.0001 g/l - insoluble                                   |
| o) Partition coefficient: n-octanol/water       | No data available                                        |
| p) Auto-ignition temperature                    | No data available                                        |
| q) Decomposition temperature                    | No data available                                        |
| r) Viscosity                                    | No data available                                        |
| s) Explosive properties                         | No data available                                        |
| t) Oxidizing properties                         | The substance or mixture is not classified as oxidizing. |

### 9.2 Other safety information

Bulk density 1.25 g/l

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Reducing agents, Hydrogen sulfide gas, Aluminum, Alkali metals, Powdered metals

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Copper oxides

Other decomposition products - No data available

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - > 2,500 mg/kg(Copper oxide)  
(OECD Test Guideline 423)

LD50 Dermal - Rat - > 2,000 mg/kg(Copper oxide)  
(OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit(Copper oxide)

Result: No skin irritation

(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit(Copper oxide)

Result: Mild eye irritation

(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

Maximisation Test - Guinea pig(Copper oxide)

Does not cause skin sensitisation.

(OECD Test Guideline 406)

#### Germ cell mutagenicity

No data available(Copper oxide)

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available(Copper oxide)

#### Specific target organ toxicity - single exposure

No data available(Copper oxide)

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available(Copper oxide)

#### Additional Information

RTECS: GL7900000

Symptoms of systemic copper poisoning may include: capillary damage, heada central nervous system excitation followed by depression, jaundice, convu renal failure. Chronic copper poisoning is typified by hepatic cirrhosis, copper deposition in the cornea as exemplified by humans with Wilson's di lead to hemolytic anemia and accelerates arteriosclerosis., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Copper oxide)

## SECTION 12: Ecological information

### 12.1 Toxicity

|                                                     |                                                                                    |
|-----------------------------------------------------|------------------------------------------------------------------------------------|
| Toxicity to fish                                    | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.19 - 0.21 mg/l - 96 h(Copper oxide) |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.011 - 0.039 mg/l - 48 h(Copper oxide)        |
|                                                     | NOEC - Lamellibranchia (mussel) - 0.007 mg/l - 288 h(Copper oxide)                 |
| Toxicity to algae                                   | NOEC - Phaeodactylum tricornutum - 0.0057 mg/l - 72 h(Copper oxide)                |

## 12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

## 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available(Copper oxide)

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other adverse effects

Very toxic to aquatic life.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: 3077

IMDG: 3077

IATA: 3077

### 14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper oxide)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper oxide)

IATA: Environmentally hazardous substance, solid, n.o.s. (Copper oxide)

### 14.3 Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA: 9

### 14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

### 14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: no

IATA: yes

### 14.6 Special precautions for user

#### Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

### Full text of H-Statements referred to under sections 2 and 3.

H400

Very toxic to aquatic life.

H410

Very toxic to aquatic life with long lasting effects.

H412

Harmful to aquatic life with long lasting effects.

**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.