

**TOTAL  
GLOBAL  
STEEL**

## Total Global Steel Ltd

### Material Safety Data Sheet

#### Product Information

Copper CAS -7440-50-8

#### Physical Data

Copper is reddish with a bright metallic lustre. It is malleable, ductile, and a good conductor of heat and electricity.

Colour	Melting point	Specific gravity	Soluble in H <sub>2</sub> O
Reddish	1083 degrees	8.89-8.94	negligible

#### Fire or Explosion Hazard

##### **Fire:**

Not considered to be a fire hazard since the bulk solid does not burn, but very finely divided particles (ultra-fine powder) may burn in air.

##### **Explosion:**

Not considered to be an explosion hazard. Reactions with incompatibles may pose an explosion hazard. Liquid copper explodes on contact with water. High concentrations of finely divided copper particles in the air may present an explosion hazard.

##### **Fire Fighting Measures:**

Dry sand or metal extinguishing powders.

#### Hazardous Identification

##### Emergency Overview

Metallic product which poses little or no immediate hazard in solid form.

##### Inhalation:



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Can Cause irritation to the nose, throat, lungs and mucous membranes. Inhalation of particulate may cause metal fume fever (high temperature, metallic taste, nausea, coughing, general weakness, muscle aches, and exhaustion), bronchitis, chills, decreased pulmonary function, and asthma-like symptoms. Inhalation of particulate containing metallic copper can cause ulceration and perforation of the nasal septum.

## Ingestion:

Copper ingestion may cause nausea, vomiting, abdominal pain, metallic taste and diarrhoea.

## Skin & Eyes:

Particulate may cause a greenish-black skin discolouration.

## Long Term Health Effects:

Prolonged or repeated exposure to copper can discolour skin and hair and irritate the skin; may cause mild dermatitis, runny nose, and irritation of the mucous membranes. Repeated ingestion may damage the liver and kidneys.

## First Aid Measures

### Inhalation:

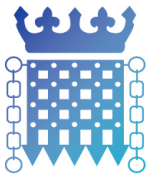
Breathing difficulty caused by inhalation of particulate requires immediate removal to fresh air.

### Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything mouth to mouth with an unconscious person.

### Skin contact:

Thoroughly wash skin cuts or wounds to remove all particulate, debris from the wound. Seek medical attention for wounds that cannot be thoroughly cleansed. Treat skin cuts and wounds with the standard first aid practices such as cleansing, disinfecting and covering to prevent wound infection and contamination before continuing to work.



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Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

### **Toxicological Information**

Inhalation:

Inhalation of dust and fumes can irritate the respiratory tract.

Ingestion: Can cause allergic reaction in some individuals.

Skin:

Can cause allergic reaction in some individual.

Eyes:

Contact with fumes can irritate the eyes.

Cancer information:

No ingredients listed as human carcinogenic by NTP or IARC.

### **Ecological Information**

Environmental Impact Information: In its solid form it has no know toxicity to ecological systems. Some copper derivatives (salts) are microelements but may be toxic in high concentrations to aquatic life.

### **Disposable Considerations**

Copper containing waste is normally collected to recover copper values. Should waste disposal be deemed necessary, follow local regulations,

### **Transport Information**

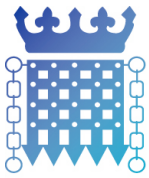
Not regulated for either air or ground shipments.

### **Handling and Storage**

Handling:

Particulate may enter the body through cuts and abrasions or other wounds on the surface of the skin. Wear gloves when handling parts with loose surface particulate or sharp edges. Store in a dry area.

### **Preventative Measures**



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If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne copper below the TLV. If ventilation alone cannot so control exposures, use approved respirators selected according to local regulations.

Avoid repeated skin contact. Wear suitable gloves. Wash skin thoroughly after handling. Launder clothing and gloves as needed.

**Prepared by:**

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**Note: Total Global Steel Ltd believes that the information in this Material Safety Data Sheet is accurate. However, Total Global Steel Ltd makes no express or implied warranty as to the accuracy of such information and expressly disclaims any liability resulting from reliance on such information.**