## Copper, Metal



### Section 1 Product Description

Product Name: Copper, Metal

**Recommended Use:** Science education applications

Synonyms: Bronze powder, C.I. 77400; Arwood Copper, Copper Shot

Distributor: Carolina Biological Supply Company

2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

#### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;





Very toxic to aquatic life.

#### **GHS Classification:**

Hazardous to the aquatic environment - Acute Category 1

### Section 3 Composition / Information on Ingredients

 Chemical Name
 CAS #
 %

 Copper, Metal
 7440-50-8
 100

#### Section 4 First Aid Measures

**Emergency and First Aid Procedures** 

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

## Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Fire and/or Explosion Hazards: Avoid Dusting. May become explosive when dispersed in air.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

### Section 6 Spill or Leak Procedures

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Collect spillage.

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Section 7 Handling and Storage

**Handling:** Avoid release to the environment.

**Storage:** Keep container tightly closed in a cool, well-ventilated place.

**Storage Code:** Green - general chemical storage

Section 8 Protection Information

ACGIH OSHA PEL

 Chemical Name
 (TWA)
 (STEL)
 (TWA)
 (STEL)

 Copper, Metal
 0.2 mg/m3 TWA
 N/A
 0.1 mg/m3 TWA
 N/A

 (fume)
 (fume): 1 mg/m3

(fume); 1 mg/m3 TWA (dust and mist)

**Control Parameters** 

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation

might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station

available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

work.

Gloves: No information available

Section 9 Physical Data

Formula: Cu Vapor Pressure: 0 hPa at 1400 °C Molecular Weight: 63.55 Evaporation Rate (BuAc=1): N/A

Appearance: Metallic Red - Orange Foil

Solid

Odor: No data available

Odor Threshold: No data available

**pH**: No data available **Melting Point**: 1083 C **Boiling Point**: 2595 C

Flash Point: No data available Flammable Limits in Air: N/A

Evaporation Rate (BuAc=1): N/A Vapor Density (Air=1): N/A

Specific Gravity: 8.94

Solubility in Water: Practically Insoluble Log Pow (calculated): No data available Autoignition Temperature: No data available Decomposition Temperature: No data available

Viscosity: No data available Percent Volatile by Volume: 0%

Section 10 Reactivity Data

Reactivity: No data available

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: None known. Avoid creating and inhaling dust. Keep away from oxidizing materials and

strong acids. Store in a cool dry place. Isolate from incompatible materials.

Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

**Routes of Entry** Inhalation, ingestion, eye or skin contact.

Symptoms (Acute): N/A

**Delayed Effects:** No data available

**Acute Toxicity:** 

Chemical Name CAS Number Oral LD50 Dermal LD50 Inhalation LC50

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Copper, Metal 7440-50-8 Oral LD50 Mouse Not determined Not determined

> 5000 mg/kg

Carcinogenicity:

**Chemical Name CAS Number** IARC NTP **OSHA** 7440-50-8 Not listed Not listed No data available Not listed

**Chronic Effects:** 

Mutagenicity: No evidence of a mutagenic effect.

Teratogenicity: No evidence of a teratogenic effect (birth defect).

Sensitization: No evidence of a sensitization effect.

Reproductive: No evidence of negative reproductive effects.

**Target Organ Effects:** 

See Section 2 Acute:

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA., Reproductive data cited., Tumorigenic data cited.

#### Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.

Mobility: No data Persistence: No data No data Bioaccumulation: Degradability: No data Other Adverse Effects: No data

**Chemical Name CAS Number Eco Toxicity** 

7440-50-8 Copper, Metal 96 HR LC50 PIMEPHALES PROMELAS 0.0068 - 0.0156 MG/L

96 HR LC50 PIMEPHALES PROMELAS < 0.3 MG/L [STATIC] 96 HR LC50 LEPOMIS MACROCHIRUS 1.25 MG/L [STATIC] 96 HR LC50 CYPRINUS CARPIO 0.8 MG/L [STATIC]

48 HR EC50 DAPHNIA MAGNA 0.03 MG/L [STATIC]

#### Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always

contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

#### Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** Air - IATA Proper Shipping Name: N/A Not regulated for air transport by IATA.

#### Section 15 Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

**Chemical Name** CAS § 313 Name § 304 RQ **CERCLA RQ** § 302 TPQ **CAA 112(2)** 

> Number TQ

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Copper, Metal	7440-50-8	Copper	5000 lb (2270 kg) final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm).	No	No	No
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## Section 16

# **Additional Information**

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

#### Glossary

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ACGIH	American Conference of Governmental	NTP	National Toxicology Program
	Industrial Hygienists	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstract Service Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response,	ppm	Parts per million
	Compensation, and Liability Act	RCRA	Resource Conservation and Recovery Act
DOT	U.S. Department of Transportation	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
N/A	Not Available	TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

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