

Safety Data Sheet

Copper, Metal

CAROLINA[®]
www.carolina.com

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;

WARNING



Very toxic to aquatic life.

GHS Classification:
Hazardous to the aquatic environment - Acute Category 1

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|----------------------|--------------|----------|
| 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

| <u>Chemical Name</u> | <u>ACGIH</u> | | <u>OSHA PEL</u> | |
|----------------------|-------------------------------------|---------------|--|---------------|
| | <u>(TWA)</u> | <u>(STEL)</u> | <u>(TWA)</u> | <u>(STEL)</u> |
| Copper, Metal | 0.2 mg/m ³ TWA (fume) | N/A | 0.1 mg/m ³ TWA (fume); 1 mg/m ³ TWA (dust and mist) | N/A |

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
Molecular Weight: 63.55
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

Vapor Pressure: 0 hPa at 1400 °C
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 > 5000 mg/kg | Not determined | Not determined |
|---------------|-----------|---------------------------------|----------------|----------------|

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

| | |
|-----------------|---|
| Acute: | See Section 2 |
| 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 |
| Bioaccumulation: | No data |
| Degradability: | No data |
| Other Adverse Effects: | No data |

| | | |
|----------------------|-------------------|---|
| Chemical Name | CAS Number | Eco Toxicity |
| Copper, Metal | 7440-50-8 | 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

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|--|---|
| Ground - DOT Proper Shipping Name: N/A | Air - IATA Proper Shipping Name: 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 Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|----------------------|-------------------|-------------------|-----------------|------------------|------------------|----------------------|

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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

California Prop 65:

No California Proposition 65 ingredients

Section 16

Additional Information

Revised: 08/21/2018

Replaces: 06/15/2018

Printed: 08-25-2018

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

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