

**MSDS 027**  
Revised 07/2009

---

MATERIAL SAFETY DATA SHEET

MWS Wire Industries  
31200 Cedar Valley Drive  
Westlake Village, CA 91362  
(818) 991-8553

---

Trade Name: Bare Copper, OFHC Copper Wire, ETP Copper Wire

---

Chemical Family: Copper

---

Chemical Formula: N/A

---

HAZARDOUS INGREDIENTS

<u>Ingredient</u>	<u>CAS No.</u>	<u>TLV</u>	<u>PEL</u>	<u>STEL</u>
Copper	7440-50-8	1 (D) / 0.2 (F)	1 (D) / 0.1 (F)	2

Note: TLV - American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (mg/m<sup>3</sup>)

PEL - OSHA Permissible Exposure Level (mg/m<sup>3</sup>), 8 hour time weighted average

STEL - ACGIH Short Term Exposure Limit (mg/m<sup>3</sup>), 15 minutes maximum

\* Ceiling Level (Not to be exceeded)      D = Dust      F = Fume      NS = Not Specified

---

PHYSICAL DATA

Boiling Point °C: N/A

Vapor Pressure: N/A

Vapor Density: N/A

% Volatile: N/A

Evaporation Rate: N/A

Solubility in H<sub>2</sub>O: Insoluble

Specific Gravity: 8.89

Melting Temperature: 1083°C

Appearance & Odor: Lustrous orange-red metal. No odor.

---

FIRE & EXPLOSION HAZARD DATA

Flash Point: N/A

Fire or Explosion Hazard: None

Note: Copper is nonflammable, although sparks from other operations may ignite flammable or combustible materials. Use extinguishing media suitable for surrounding materials. Fire fighters should use self-contained breathing apparatus as deemed necessary.

---

## HEALTH HAZARD DATA

Fine powders, granules and fumes from welding or abrasive operations may pose a health hazard. When burned, soldered or brazed copper wire and solder or brazing material may give off fumes that cause eye and/or respiratory irritation. Use adequate local exhaust to prevent irritation and maintain fume levels below OSHA ceiling limits.

Short Term Exposure: Dust and fumes irritate the eyes, nose and throat. Symptoms may include cough, metallic taste in mouth, fever, fatigue and nausea.

Long Term Exposure: Watering of the eyes, headaches, difficulty in breathing, coughing, severe chest pains and in acute cases, lung disease, lung fibrosis, pneumoconiosis or neurological damage.

Emergency First Aid Procedure:

- In case of fume inhalation, remove from exposure and consult a physician.
- In case of eye contact, flush with large amounts of water for at least fifteen minutes. Seek medical attention.
- In case of ingestion, seek immediate medical attention.

Carcinogenic assessment: Copper has not been identified as a known or suspected carcinogen by NTP, IARC or OSHA.

---

## REACTIVITY DATA

Stability: Stable. Hazardous polymerization will not occur.

---

## SPILL, LEAK, DISPOSAL PROCEDURES

Scrap copper wire has reclamation value. Where this is not practical, it may be disposed in accordance with state and federal regulations. In solid form, copper poses no special clean up problems. If material is in powder or dust form, clean up should be conducted to minimize generation of airborne powder and dust and to avoid contamination of water. Depending on the quantity, spills or releases to the environment may require a report to the National Response Center at (800) 424-8802.

---

## SARA TITLE II SECTION 313

Copper is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372 of the Federal Register. Additional information can be obtained from the Emergency Planning and Community Right-To-Know Information Hot Line, US EPA, at (800) 535-0202.

---

## EC RoHS DIRECTIVE COMPLIANCE

Bare copper wire complies with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

---

## ECHA REACH COMPLIANCE

Copper magnet wire meets the definition of an article under REACH and does not contain SVHC listed as of the revision date of this MSDS. Also see [http://www.mwswire.com/pdf\\_files/reach.pdf](http://www.mwswire.com/pdf_files/reach.pdf) for more information on MWS Wire products and REACH.

---

## SPECIAL PROTECTION

Wear safety glasses when risk of eye injury is present, particularly during machining, grinding, welding, powder handling, etc. Gloves and other protective equipment may be required during handling operations as appropriate to the circumstances of exposure.

---

## SPECIAL PRECAUTIONS

When welding, melting, casting, grinding, sanding, polishing or otherwise abrading the surface of copper wire in a manner which generates finely divided particles, an exposure to copper in excess of the occupational standard can occur. Use with adequate ventilation to meet listed exposure limits. Processes generating airborne particles must be air sampled to determine exposure levels. Where exposure data indicate, medical surveillance should be conducted.

---

## PACKAGING & LABELING REQUIREMENTS

D.O.T. Shipping Name: Not regulated

Hazard Class: NA

---

MWS has attempted to provide current and accurate information in this data sheet, however MWS makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage or injury of any kind which may arise out of the use or reliance on the information by any person. Contact person: Ken Goss at (818) 991-8553.

---