



## MATERIAL SAFETY DATA SHEET

MANUFACTURER INFORMATION	
Manufacturer Name & Address: KobeWieland Copper Products, LLC 3990 U.S. 311 Hwy N. P.O. Box 160 Pine Hall, NC 27042 Phone: (336) 427-6611 Fax: (336) 548-1576	MSDS INFORMATION: (336) 427-6611 PREPARED BY: Glenn Newman DATE ISSUED: Original September 22, 1992 Re-Type June 12, 2006 (Note: reason for Re-Type is Storage Information change.)

IDENTIFICATION
CHEMICAL NAME: Copper [Cu]  CAS NUMBER: 7440-50-8  TRADE NAME: Copper Tube

SPECIAL REGULATORY HAZARDS					
HAZARDOUS COMPONENTS	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>NIOSH</u>	<u>CANADA</u>	<u>CAS NO.</u>
Cu(s) 99.9 <sup>+</sup>	Fume 0.1 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	-----	TWA 1 mg/m <sup>3</sup>	7440-50-8
	Dust 1.0 mg/m <sup>3</sup>	1.0 mg/m <sup>3</sup>	-----	STEL 2 mg/m <sup>3</sup>	
(s) Denotes chemicals subject to reporting requirements of SARA Title III, Section 313.					

PHYSICAL DATA			
APPEARANCE AND ODOR:	Red, Tubular shape; Negligible to no odor.		
SOLUBILITY:	Insoluble		
MELTING POINT (°C):	1,083	VAPOR PRESSURE (mm Hg):	N/A
BOILING POINT (°C):	2,595	VAPOR DENSITY (AIR = 1):	N/A
SPECIFIC GRAVITY (H <sub>2</sub> O = 1):	8.94	EVAPORATION RATE (Butyl Acetate = 1):	N/A

### FIRE & EXPLOSION HAZARD DATA

FLASH POINT:	N/A	AUTOIGNITION TEMP:	N/A
EXTINGUISHING MEDIA:	No specific agents recommended.	FLAMMABLE LIMITS:	N/A (LEL): N/A
UNUSUAL HAZARDS:	N/A	(UEL):	N/A
SPECIAL FIRE FIGHTING PROCEDURES:	Recommended NIOSH / MSHA approved self-contained breathing Apparatus and full protective clothing be worn.		

### REACTIVITY DATA

STABILITY	Stable
INCOMPATIBILITY (Materials to Avoid):	Contact with 52% hydrogen peroxide may cause a violent reaction. Contact with acetylene may form acetylides. Incompatible with 1-bromo-2-propyne. Water boils violently on contact with liquid copper.
DECOMPOSITION PRODUCTS:	At temperatures above boiling point, metal oxide fumes may be involved.
HAZARDOUS POLYMERIZATION:	Will Not Occur
DECOMPOSITION PRODUCTS:	N/A

### SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:	Where airborne exposures may exceed OSHA/ACGIH permissible Concentrations, the minimum respiratory protection recommended is a negative air purifying respirator with cartridges that are NIOSH/MSHA approved against dust, fumes and mists having a TWA not less than $0.05 \text{ mg/m}^3$ .
ENGINEERING CONTROLS:	Local exhaust ventilation is recommended for control of airborne dust, fumes and vapors in confined areas.
PERSONAL PROTECTION EQUIPMENT:	Gloves are recommended when exposed to dust. Approved safety glasses are recommended.
OTHER PROTECTIVE CLOTHING / EQUIPMENT:	Protective clothing for heavy dust exposure. Contaminated clothing should be removed before leaving plant.
SPECIAL WORK / HYGIENIC PRACTICES:	Avoid inhalation or ingestion. Practice good housekeeping and personal hygiene. If significant dust accumulation occurs, a shower is recommended.



## STORAGE, SPILLS & DISPOSAL INFORMATION

**STORAGE:** General storage procedures are acceptable and should apply.  
Store in a cool, dry, ventilated area.  
Isolate product from incompatible substances (see REACTIVITY DATA section).  
Avoid storage in wet, moist or high humidity environments that may lead to corrosion.  
Avoid contact with strong oxidizers. Protect against physical damage.  
It is recommended that product remains in package until ready for use.  
Avoid activities that generate fumes or dust.  
Use NIOSH/MSHA approved respiratory protection where ventilation cannot be provided.

**SPILLS:** Any method that maintains minimal dust levels is acceptable. Vacuuming is preferred for removal of dust. Do not use compressed air for cleaning. Use approved respiratory protection when exposed to dust or fumes.

**DISPOSAL** Disposal of in accordance with state, local and federal regulations.

## HEALTH RELATED DATA

ACUTE	INHALATION & INGESTION:	Dust / fumes can cause Metal Fume Fever, chills, Nausea, chest tightness, metallic taste and irritation of gastrointestinal tract.
	EYE CONTACT:	Small particles may cause irritation.
	SKIN CONTACT:	N/A
	INHALATION & INGESTION:	N/A
CHRONIC		
	EYE CONTACT:	N/A
	SKIN CONTACT:	Exposure to copper dust and fumes can cause skin and hair discoloration.
FIRST AID	INHALATION:	Move to fresh air. If not breathing, begin artificial respiration. If experiencing difficulty with breathing, give O <sub>2</sub> . Get medical attention immediately.
	INGESTION:	Give 4-8 ounces of milk or water to conscious individual and induce vomiting. Get medical attention immediately.
	EYE CONTACT:	Flush with water. If irritation develops, get medical attention.
	SKIN:	Flush with water. If irritation develops, get medical attention.

