



REVISED 4/15/99

## MATERIAL SAFETY DATA SHEET

COMPLIES WITH 29 CFR 1910.1200.  
OSHA HAZARD COMMUNICATION RULE

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### CHEMICAL IDENTITY

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LABEL IDENTITY	<b>Copper (II) Oxide</b>
CHEMICAL NAME/SYNONYMS	<b>Copper (II) Oxide</b>
FORMULA	<b>CuO</b>
CHEMICAL FAMILY	<b>Oxide</b>
CAS REGISTRY NUMBER	<b>1317-38-0, Listed on the TSCA Inventory</b>
HAZARDOUS INGREDIENTS	<b>Not established</b>

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### PHYSICAL AND CHEMICAL PROPERTIES

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COLOR, FORM AND ODOR	<b>Odorless, Black powder or crystals</b>
BOILING POINT	<b>ND</b>
DENSITY (gm/cc)	<b>at 20°C 6.2 - 6.49 g/cm<sup>3</sup></b>
VAPOR PRESSURE @ 20°	<b>ND</b>
% VOLATILE BY VOLUME (%)	<b>NA</b>
REACTION WITH WATER	<b>ND</b>
EVAPORATION RATE (H <sub>2</sub> O=1)	<b>NA</b>
SOLUBILITY IN WATER	<b>Insoluble</b>
MELTING POINT	<b>1326° C</b>

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### FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT	<b>NA</b>
AUTOIGNITION TEMPERATURE (°C)	<b>ND</b>
FLAMMABILITY	<b>Non-flammable</b>
EXTINGUISHING MEDIA	<b>Use fire fighting measures that suit the surrounding fire</b>
SPECIAL FIRE FIGHTING PROCEDURES	<b>Wear a self-contained breathing apparatus</b>
UNUSUAL FIRE & EXPLOSION HAZARDS	<b>Wear fully protective impervious suit</b>
	<b>None known</b>

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### HEALTH HAZARD INFORMATION

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TOXICITY DATA	<b>No data</b>
HMIS RATING:	
HEALTH: <b>nd</b> FLAMMABILITY: <b>nd</b> REACTIVITY: <b>nd</b> PERSONAL PROTECTION: <b>nd</b>	

ROUTES OF ENTRY	INHALATION:	<b>Yes</b>
	SKIN:	<b>No</b>
	INGESTION:	<b>Yes</b>



## COPPER (II) OXIDE MATERIAL SAFETY DATA SHEET

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### HEALTH HAZARD INFORMATION CONTINUED

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MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Harmful by inhalation and if swallowed. Irritating to eyes, respiratory system and skin.**

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **as the sublimed oxide, copper may be responsible for one form of metal fume fever. Believed to be of low toxicity.**

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CARCINOGENICITY: **No** NTP: **No** IARC MONOGRAPHS: **No** OSHA REGULATE: **No**

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EMERGENCY FIRST AID PROCEDURES:

INGESTION: **Get medical advice. Information for doctor – The following symptoms May occur: Nausea, gastric or intestinal disorders.**

INHALATION: **Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.**

SKIN CONTACT: **Immediately wash of with soap and water and rinse thoroughly. Seek immediate medical advice.**

EYE CONTACT: **Rinse opened eye for several minutes under running water. Then Consult a doctor.**

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### REACTIVITY DATA

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STABILITY	<b>Stable</b>
CONDITIONS CONTRIBUTING TO UNSTABILITY	<b>ND</b>
INCOMPATIBILITY (MATERIALS TO AVOID)	<b>None known</b>
HAZARDOUS DECOMPOSITION PRODUCTS	<b>None known</b>
HAZARDOUD POLYMERZATION	<b>Will Not Occur</b>
CONDITIONS TO AVOID	<b>NA</b>

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### SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation**

WASTE DISPOSAL METHOD:

**Consult federal, state and local regulations for proper disposal.**



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### SPECIAL PROTECTIVE INFORMATION

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RESPIRATORY PROTECTION	<b>NIOSH/MSHA approved respirator if ventilation controls are not possible or are inadequate.</b>
LOCAL EXHAUST MECHANICAL (general)	<b>Fume hood NA</b>

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### SPECIAL PROTECTIVE INFORMATION CONTINUED

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SPECIAL OTHER	<b>NA NA</b>
PROTECTIVE GLOVES	<b>Rubber</b>
EYE PROTECTION	<b>Safety glasses</b>
OTHER PROTECTIVE EQUIPMENT	<b>Wear protective clothing to prevent contamination of skin and clothes</b>

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### SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:  
**Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Store away from reducing agents.**

TRANSPORTATION REQUIREMENTS	DOT CLASS: <b>None</b>
	UN NUMBER: <b>N. C.</b>
	IMCO CLASS: <b>N. C.</b>
	OTHER: <b>ND</b>
PRECAUTIONARY LABELING	<b>NONE</b>

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**NA= NOT APPLICABLE**

**ND= NO DATA FOUND**

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