



**American  
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## Barker Industries, Inc.

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### MATERIAL SAFETY DATA SHEET

Date Issued: 1/08/08

#### Section 1 – Product and Company Information

**Product Name**

**COPPER (II) OXIDE**

Product Number

Company

Barker Industries

Street Address

220 Crompton Street

City, State, Zip, Country

Charlotte NC 28273 USA

Technical Phone:

(704) 391-1023

Emergency Phone:

Chemtrec (1-800-424-9300)

Fax:

704-393-0464

#### Section 2 – Composition/Information on Ingredients

Substance Name

CAS #

SARA 313

Copper (II) Oxide

1317-38-0

Yes

#### Section 3 – Hazard Identification

EMERGENCY OVERVIEW:

Toxic (USA) Harmful (EU).

Harmful if swallowed.

HMIS RATING

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

HEALTH: 2

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FLAMMABILITY: 0  
REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

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#### **Section 4 – First Aid Measures**

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##### **ORAL EXPOSURE**

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

##### **INHALATION EXPOSURE**

If inhaled, remove to fresh air. If breathing becomes difficult, give oxygen & call a physician.

##### **DERMAL EXPOSURE**

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

##### **EYE EXPOSURE**

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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#### **Section 5 – Fire Fighting Measures**

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##### **FLASH POINT**

N/A

##### **AUTOIGNITION TEMP**

N/A

##### **FLAMMABILITY**

N/A

##### **EXTINGUISHING MEDIA**

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

##### **FIREFIGHTING**

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions

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#### **Section 6 – Accidental Release Measures**

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##### **PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL**

Evacuate area

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PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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**Section 7 – Handling and Storage**

HANDLING

User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed.

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**Section 8 – Exposure Controls / PPE**

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.  
Hand: Compatible chemical-resistant gloves.  
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling

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**Section 9 – Physical and Chemical Properties**

Appearance Physical State: Solid.

Color: Black

Form: Powder

Property	Value	At Temperature or Pressure
Molecular Weight	79.54 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	1,336 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	

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Vapor Density	N/A	
Saturated Vapor Conc.		N/A
SG/Density	6.32 g/cm <sup>3</sup>	
Bulk Density	1.25 kg/l	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content		N/A
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.		N/A
Flash Point	N/A	
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

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### **Section 10 – Stability and Reactivity**

#### STABILITY

Stable: Stable.

Materials to Avoid: Finely powdered metals, Alkali metals, Aluminum, Hydrogen sulfide gas, Reducing agents.

#### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Copper, Copper alloys.

#### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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### **Section 11 – Toxicological Information**

#### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

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Inhalation: Material may be irritating to mucous membranes and upper respiratory tract.  
May be harmful if inhaled.  
Ingestion: Harmful if swallowed.

#### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has lead to hemolytic anemia and accelerates arteriosclerosis.

#### TOXICITY DATA

Oral  
Rat  
470 mg/kg  
LD50

Intratracheal  
Rat  
250 mg/kg  
LD50

Intraperitoneal  
Mouse  
273 mg/kg  
LD50

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#### Section 12 – Ecological Information

No data available

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#### Section 13 – Disposal Considerations

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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#### Section 14 – Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

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Non-Hazardous for Air Transport: Non-hazardous for air transport.

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### **Section 15 – Regulatory Information**

#### EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn  
Indication of Danger: Harmful.  
R: 22  
Risk Statements: Harmful if swallowed.

#### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Toxic (USA) Harmful (EU).  
Risk Statements: Harmful if swallowed.

#### UNITED STATES REGULATORY INFORMATION

SARA LISTED: Yes  
NOTES: This product is subject to SARA section 313 reporting requirements - copper compounds.  
TSCA INVENTORY ITEM: Yes

#### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.  
DSL: Yes  
NDSL: No

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### **Section 16 – Other Information**

For R&D use only. Not for drug, household or other uses.

**Barker Industries provides this information in good faith. It is believed to be correct but does not claim to be all-inclusive and shall be used only as a guide. No warranty, either expressed or implied is given for the information contained in this report. Barker Industries, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.**

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