

# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND CONTACT INFORMATION

Product Name: Cupric Oxide (Copper (II) Oxide)

AEB-1002, AEB-1003, AEB-1014, AEB-1051,AR01029

Alpha Resources, Inc.  
P.O. Box 199  
Stevensville, MI 49127  
Phone: 269-465-5559

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	%W	CHEMICAL NAMES	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)	NIOSH TWA (mg/m3)
1317-38-0	100	Cupric Oxide	N/A	N/A	N/A

## 3. HAZARD IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation.

SKIN: May cause skin irritation.

INHALATION: Causes irritation of respiratory tract, symptoms may include coughing, sore throat and shortness of breath. May result in ulceration and perforation of respiratory tract. When heated, this compound may give off copper fume, which can cause symptoms similar to the common cold, including chills and stuffiness of the head.

INGESTION: Systematic copper poisoning may result from ingestion of this compound. Symptoms may include capillary damage, headache, cold sweat, weak pulse, kidney and liver damage, central nervous excitation followed by depression, jaundice, convulsions, blood effects, paralysis and coma. Death may occur from shock or renal failure.

CHRONIC OVEREXPOSURE: Prolonged or repeated skin exposure may cause dermatitis. Prolonged or repeated exposure to dusts of copper salts may cause discoloration of the skin or hair, blood and liver damage, ulceration and perforation of the nasal septum, runny nose, metallic taste and atrophic changes and irritation of the mucous membranes. Damage to liver, kidneys and lungs

ACUTE OVEREXPOSURE: Not available.

MEDICAL CONDITIONS AGGRAVATED: Persons with pre-existing skin disorders, impaired liver, kidney or pulmonary function, glucose 6-phosphate-dehydrogenase deficiency, or pre-existing Wilson's disease may be more susceptible to the effects of this material.

CARCINOGENICITY: None.

## 4. FIRST AID MEASURES

EYES: Flush with large amounts of water. Lift lower and upper eyelids occasionally. Get medical attention if irritation persists.

INHALATION: Removed from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN: wash off excess material from skin. Remove contaminated clothing and wash before reuse.  
INGESTION: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

## **5. FIRE FIGHTING MEASURES**

### **FLAMMABLE PROPERTIES**

Non-flammable

Flash Point: Not available

Flammable Limits: (% by Volume in Air): Lower: None Upper: None

AUTO-IGNITION TEMPERATURE: N/A

HAZARDOUS COMBUSTION PRODUCTS: N/A.

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire.

FIREFIGHTING INSTRUCTIONS: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.

## **6. ACCIDENTAL RELEASE MEASURES**

SMALL/LARGE SPILL: Wear suitable protective clothing. Carefully sweep up and remove.

## **7. HANDLING AND STORAGE**

HANDLING: Keep container closed and store in a cool dry area.

STORAGE: Keep container closed and store in a cool dry area.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

ENGINEERING CONTROLS: local ventilation to meet any exposure limits.

RESPIRATORY PROTECTION: NIOSH/MSHA respirator if exposure above the PEL limit.

SKIN AND HAND PROTECTION: Proper gloves are recommended.

EYE AND FACE PROTECTION: Safety glasses are recommended. Eyewash station should be available in case of accident.

OTHER PROTECTIVE EQUIPMENT: None required.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE: black/brown powder, granules or wires

BOILING POINT: N/A

FREEZE-MELT POINT: 1026 C

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SOLUBILITY IN WATER: Negligible.

SPECIFIC GRAVITY: N/A

pH: N/A

ODOR: None

PERCENT VOLATILES: N/A

EVAPORATION RATE: N/A

## **10. STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable.

INCOMPATIBILITY: Aluminum, Boron, Cesium Acetylene Carbide, Dirubidium Acetylide, Hydrazine, Hydrogen, Hydrogen Sulfide, Lead Oxide, Magnesium, Metals, Phospham, Potassium, Phthalic Anhydride, rubidium acetylene carbide, Sodium, Titanium, Zirconium. Forms Acetylides with Acetylene, sodium Hypobromite and Nitromethane.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic metal fumes may form when heated to decomposition.

HAZARDOUS POLYMERIZATION: None.

## **11. TOXICOLOGICAL INFORMATION**

Not available.

## **12. ECOLOGICAL INFORMATION**

None available.

## **13. DISPOSAL CONSIDERATION**

Dispose of in accordance with federal, state and local regulations.

## **14. TRANSPORTATION INFORMATION**

USA DOT: Not regulated

## **15. REGULATORY INFORMATION**

### US FEDERAL REGULATIONS

TSCA STATUS: N/A

CERCLA Reportable Quantity: N/A

RCRA Status: Not regulated

SARA TITLE III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: Acute

Section 313 Toxic Chemicals: None

### CANADAIN REGULATIONS

WHMIS: Not regulated

## **16. OTHER INFORMATION**

Hazard Index: (0-4, 4= Extreme)

Health: 2 Fire: 1 Reactivity: 0

## **SUPPLEMENTAL INFORMATION**

The data and information as stated was furnished by the manufacturer/vendor &/or supplier of this product. Alpha Resources, Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

Date Prepared: January 11, 2013

Prepared by: Ken Mantei