

# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND CONTACT INFORMATION

Product Name: Copper (Standards, Accelerator, Capsules, Plugs)

AR 147, AR 148, AR 149, AR 266, AR 366, AEB-1035, AEB-1013, AR 189, AR1189, AR 184, AR 571, AR 621, AR 643, AR2304

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	%W	CHEMICAL NAMES	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)	NIOSH TWA (mg/m3)
7440-50-8	100	Copper	1	1	N/A

## 3. HAZARD IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation.

SKIN: May cause skin irritation.

INHALATION: Irritation of upper respiratory tract, headache, nausea, vomiting, diarrhea, chills, fever and aching muscles.

INGESTION: Nausea, vomiting and diarrhea.

CHRONIC OVEREXPOSURE: Damage to liver, kidneys and lungs

ACUTE OVEREXPOSURE: Not available.

MEDICAL CONDITIONS AGGRAVATED: Wilson's disease.

CARCINOGENICITY: None.

## 4. FIRST AID MEASURES

EYES: Flush with large amounts of water. Get medical attention if irritation persists.

INHALATION: Removed from exposure to fresh air immediately.

SKIN: Wash skin with plenty of soap and water.

INGESTION: Immediately give large amounts of water. Get medical attention.

## 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: Dust may form explosive mixture in air.

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: Nothing special.

STORAGE: Keep container closed.

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

ENGINEERING CONTROLS: local ventilation to meet 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.

OTHER PROTECTIVE EQUIPMENT: None required.

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

APPEARANCE: Reddish metal

BOILING POINT: 4703 F (2595 C)

FREEZE-MELT POINT: 1981 F (1083 C)

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SOLUBILITY IN WATER: Negligible.

SPECIFIC GRAVITY: 8.92

pH: N/A

ODOR: None

PERCENT VOLATILES: N/A

EVAPORATION RATE: N/A

## **10. STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable.

INCOMPATIBILITY: Strong acids, strong oxidizing agents, strong bases, acetylene, acetaldehyde and magnesium.

HAZARDOUS DECOMPOSITION PRODUCTS: Copper fumes.

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: On toxic Substance Control Inventory

CERCLA Reportable Quantity: Copper, 5000 lbs

RCRA Status: Not regulated

##### SARA TITLE III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: Chronic

Section 313 Toxic Chemicals: Copper

##### CANADAIN REGULATIONS

WHMIS: Not regulated

#### **16. OTHER INFORMATION**

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

Health: 1 Fire: 0 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.

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Prepared by: Scot Burns