

# SAFETY DATA SHEET

## SECTION 1 : IDENTIFICATION

Product identifier used on the label:

**Product Name:** COPPER ALLOY MSP1  
**SDS Manufacturer Number:** 226997

Other means of identification:

Recommended use of the chemical and restrictions on use:

Chemical manufacturer address and telephone number:

**Manufacturer Name:** PMX Industries, Inc.  
**Address:** 5300 Willow Creek Drive SW  
Cedar Rapids, Iowa 52404-4303  
USA  
**General Phone Number:** 319-368-7700  
**General Fax Number:** 319-368-7701

Emergency phone number:

**Emergency Phone Number:** 319-368-7700

## SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

**Signal Word:** Not applicable.  
**GHS Class:** Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200..

Hazards not otherwise classified that have been identified during the classification process:

Copper

**Emergency Overview:** Copper alloy products in the natural state do not present a hazard for emergency response personnel.  
**Route of Exposure:** Inhalation, Eye Contact, Skin Contact  
**Potential Health Effects:** Copper alloy products in the natural state do not present an inhalation, ingestion, or contact hazard. However, operations such as burning, welding, sawing, brazing, or grinding may release fumes and/or dusts which may present health hazards if occupational exposure limits are exceeded.  
**Eye:** Short-term exposure to fumes/dust may produce irritation.  
**Skin:** Repeated or prolonged exposure to copper dusts or mists may cause irritant or allergic contact dermatitis.  
**Inhalation:** Short-term exposure to fumes/dust may produce irritation of the respiratory system. High concentrations of copper oxide fumes may cause metal fume fever.  
**Ingestion:** Abdominal pain, nausea, vomiting.  
**Carcinogenicity:** See Toxicological Information (Section #11)  
**Potential Environmental Effects:** POTENTIAL ENVIRONMENTAL EFFECTS: None known. Product has not been tested for environmental properties.  
**Signs/Symptoms:** Metal fume fever - metallic taste in mouth, dryness, and irritation of the throat, and influenza-like symptoms. The effects may be delayed.  
**Target Organs:** Upper respiratory tract, eyes, skin  
**Aggravation of Pre-Existing Conditions:** Exposure to fumes or dust may aggravate existing respiratory disease or dermatitis.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Copper	7440-50-8	99.3% by Mole	231-159-6

## SECTION 4 : FIRST AID MEASURES

Description of necessary measures:

**Eye Contact:** Flush with water for at least 15 minutes.  
**Skin Contact:** Wash with soap and water.  
**Inhalation:** If exposed to excessive levels of metal fumes, remove to fresh air. Seek medical attention.

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## SECTION 5 : FIRE FIGHTING MEASURES

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Suitable and unsuitable extinguishing media:

**Suitable Extinguishing Media:** Use extinguishing media appropriate to the surrounding material.  
**Fire Fighting Instructions:** Copper alloy products in the solid state present no fire or explosion hazard, but may react with strong acids, bases, or oxidizing agents.

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## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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Methods and materials for containment and cleaning up:

**Spill Cleanup Measures:** STEPS TO BE TAKEN IN THE EVENT OF SPILLS, LEAKS, OR RELEASES: Not applicable

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## SECTION 7 : HANDLING and STORAGE

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Precautions for safe handling:

**Handling:** In welding, precautions should be taken for airborne contaminants that may originate from components of the welding rod.

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## SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

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EXPOSURE GUIDELINES:

**Copper :**

**Guideline ACGIH:** TLV-TWA: 1 mg/m<sup>3</sup>  
TLV-TWA: 0.2 mg/m<sup>3</sup>  
**Guideline OSHA:** PEL-TWA: 1 mg/m<sup>3</sup>  
PEL-TWA: 0.1 mg/m<sup>3</sup>

Appropriate engineering controls:

**Engineering Controls:** Local exhaust ventilation should be utilized when welding, burning, sawing, brazing, grinding, or machining when exposure exceeds occupational exposure limits.

Individual protection measures:

**Eye/Face Protection:** Safety glasses or goggles should be utilized as required by exposure. Other protective equipment should be utilized as required by welding standards.  
**Skin Protection Description:** Wear appropriate personal protective clothing to prevent skin contact with copper dusts and mists.  
**Respiratory Protection:** NIOSH-approved dust or fume respirator should be used to avoid excessive inhalation of particulates when exposure exceeds occupational exposure limits.  
**Other Protective:** OTHER PREVENTIVE MEASURES: Do not eat, drink, or smoke during work. Wash hands before eating or smoking.

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## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

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PHYSICAL AND CHEMICAL PROPERTIES:

**Physical State:** Solid  
APPEARANCE: Lustrous metal  
**Color:** Salmon-colored  
**Odor:** None  
**Melting Point:** Not Available  
**Density:** LB/IN<sup>3</sup>: Not available  
**Specific Gravity:** Not Available  
**Vapor Density:** (Air = 1): Not applicable  
**Vapor Pressure:** Not Applicable  
**Percent Volatile:** Not Applicable  
**Evaporation Rate:** Not Applicable  
**pH:** Not Applicable  
**Flash Point:** Not Applicable  
**Lower Flammable/Explosive Limit:** (%): None

Upper Flammable/Explosive Limit: (%) : None  
Auto Ignition Temperature: Not Applicable

## SECTION 10 : STABILITY and REACTIVITY

### Reactivity:

Reactivity: Possibility of Hazardous Reactions: Will not occur

### Chemical Stability:

Chemical Stability: Stable

### Conditions To Avoid:

Conditions to Avoid: None

### Incompatible Materials:

Incompatible Materials: Mercury, ammonia, acetylene acids. Contact with strong acids, bases, or oxidizing agents

### Hazardous Decomposition Products:

Special Decomposition Products: Metallic dust or fumes may be produced during welding, burning, grinding, and machining.

## SECTION 11 : TOXICOLOGICAL INFORMATION

### TOXICOLOGICAL INFORMATION:

#### Copper :

Acute Toxicity: LD50: 0.07 mg/kg (mouse, intraperitoneal)

#### Copper :

ACGIH: No

IARC: No

NTP: No

#### Copper :

Ingestion: TDLo: 120 µg/kg (human, oral-gastrointestinal effects)

Chronic Effects: Repeated or prolonged overexposure to copper fume may cause the skin and hair to change color

## SECTION 12 : ECOLOGICAL INFORMATION

### Ecotoxicity:

Ecotoxicity: No environmental information found for this product.

#### Copper :

### Ecotoxicity:

Ecotoxicity: Not Applicable

## SECTION 13 : DISPOSAL CONSIDERATIONS

### Description of waste:

Waste Disposal: According to local, state, and federal regulations.

## SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name: Not restricted as a dangerous good.

DOT UN Number: Not restricted as a dangerous good.

## SECTION 15 : REGULATORY INFORMATION

### Safety, health and environmental regulations specific for the product:

#### Copper :

TSCA Inventory Status: Listed

Section 313: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Canada DSL: Listed

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**SECTION 16 : ADDITIONAL INFORMATION**

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**HMIS Ratings:**

SDS Creation Date: March 08, 2004

SDS Revision Date: September 09, 2015

**Disclaimer:**

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