

SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product identifier used on the label:

Product Name: COPPER ALLOYS 101, 102,103, 104,110, 122,151, XP5
SDS Manufacturer Number: 226996

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	99.8 - 99.99% 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.

SECTION 5 : FIRE FIGHTING MEASURES

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.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:

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

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Copper :

Guideline ACGIH: TLV-TWA: 1 mg/m³
TLV-TWA: 0.2 mg/m³
Guideline OSHA: PEL-TWA: 1 mg/m³
PEL-TWA: 0.1 mg/m³

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.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Solid
APPEARANCE: Lustrous metal
Color: Salmon-colored
Odor: None
Melting Point: 1,981 deg F
Density: 0.3230 LB/IN³
Specific Gravity: 8.9
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

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

SDS Creation Date: December 15, 2004

SDS Revision Date: September 09, 2015

Disclaimer:

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