SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product identifier used on the label:

COPPER NICKEL SILICON ALLOYS 7026, XP175 Product Name:

SDS Manufacturer Number: 226993

Other means of identification:

Recommended use of the chemical and restrictions on use:

Chemical manufacturer address and telephone number:

Manufacturer Name: PMX Industries, Inc.

5300 Willow Creek Drive SW Address: Cedar Rapids, Iowa 52404-4303

USA

General Phone Number: 319-368-7700 319-368-7701 General Fax Number:

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:

Emergency Overview: Copper alloy products in the natural state do not present a hazard for emergency response personnel.

Route of Exposure: Inhalation, Eve 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.

Inhalation:

Short-term exposure to fumes/dust may produce irritation of the respiratory system. Exposure to high concentrations of copper or tin oxide fumes may cause metal fume fever.

Potential Environmental Effects: None known. Product has not been tested for environmental properties.

Nickel

Inhalation: Short-term exposure to fumes/dust may produce irritation of the respiratory system.

Ingestion of large doses of nickel compounds (1-3 $\,\mathrm{mg/kg})$ has been shown to cause intestinal disorders, convulsions, and asphyxia. Ingestion:

Signs/Symptoms: Nickel overexposure - effects on nasal sinuses, including inflammation and ulceration.

Target Organs: Upper respiratory tract, eyes, skin

Aggravation of Pre-Existing Conditions: Exposure to fumes or dust may aggravate existing respiratory disease or dermatitis.

Copper

Skin: Repeated or prolonged exposure to copper dusts or mists may cause irritant or allergic contact

Inhalation: Exposure to high concentrations of copper or tin oxide fumes may cause metal fume fever.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name CAS# **Ingredient Percent** EC Num.

7440-02-0 2% % Nickel 231-111-4 Copper 7440-50-8 97 - 98% % 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: 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:

Nickel:

Guideline ACGIH: TLV-TWA: 1.5 mg/m3 Inhalable fraction (I)

Guideline OSHA: PEL-TWA: 1 mg/m3
PEL-TWA: 1 mg/m3
PEL-TWA: 1 mg/m3

PEL-TWA: 1 mg/m3

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:

Other Protective:

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.

should be dillized 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.

Do not eat, drink, or smoke during work. Wash hands before eating or smoking.

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Solid
APPEARANCE: Lustrous metal

Color: Salmon-colored

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

Odor: None

Melting Point: Not Available

Density: LB/IN3: Not available

Specific Gravity: Not Available

Vapor Density: (Air = 1): Not applicable

Vapor Pressure: Not Applicable Percent Volatile: Not Applicable Evaporation Rate: Not Applicable Not Applicable pH: 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

<u>Incompatible Materials:</u>

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:

Nickel:

Acute Toxicity: LD50: 250 mg/kg (rodent, intraperitoneal)

Copper:

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

Nickel:

ACGIH: No
IARC: Yes
NTP: Yes

Copper:

ACGIH: (Fume, dusts & mists): No
IARC: (Fume, dusts & mists): No
NTP: (Fume, dusts & mists): No

Nickel:

Chronic Effects: Hypersensitivity to nickel is common and may cause allergic contact dermatitis, pulmonary asthma, and

conjunctivitis.

Copper:

Ingestion: ACUTE TOXICITY:

TDLo: 120 $\mu g/kg$ (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: 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:

Nickel:

TSCA Inventory Status: Listed

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

California PROP 65: Listed: cancer.

Canada DSL: Listed EC Number: 231-111-4

Copper:

TSCA Inventory Status: Listed

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

Canada DSL: Listed EC Number: 231-159-6

SECTION 16: ADDITIONAL INFORMATION

HMIS Ratings:

SDS Creation Date: December 15, 2004 SDS Revision Date: September 09, 2015

Disclaimer:

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