

MSDS No.: FP-3
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MATERIAL SAFETY DATA SHEET

SECTION I	GENERAL INFORMATION		
A.	Material Name: <u>Wrot copper fittings</u>		
	Other Names: <u>Sweat; solder fittings</u>		Chemical Family: <u>Copper</u>
B.	Manufacturer:	NIBCO INC. 1516 Middlebury Street P.O. Box 1167 Elkhart, IN 46515	Telephone: 574-295-3000 For chemical emergency - spill, leak, fire exposure or accident, call: CHEMTEL 1-800-255-3924 day or night

SECTION II		HAZARDOUS INGREDIENTS		
Ingredient	CAS #	Weight %	ACGIH TLV	OSHA PEL
Copper	7440-50-8	99.9%	0.2 mg/m ³ fume 1 mg/m ³ dust	0.1 mg/m ³ fume 1 mg/m ³ dust
Phosphorus	7723-14-0	0.0-0.05	0.1 mg/m ³	0.1 mg/m ³

KNOWN HAZARDS UNDER 29 CFR 1910.1200											
	Yes	No		Yes	No		Yes	No		Yes	No
Combustible Liquid		x	Skin Hazard		x	Oxidizer		x	Reproductive Toxin		x
Flammable Material		x	Eye Hazard		x	Organic Peroxide		x	Blood Toxin		x
Pyrophoric Material		x	Toxic Agent		x	Corrosive Material		x	Nervous Sys. Toxin		x
Explosive Material		x	Highly Toxic Agent		x	Compressed Gas		x	Lung Toxin		x
Unstable Material		x	Sensitizer		x	Irritant		x	Liver Toxin		x
Water Reactive Mat.		x	Carcinogen		x				Kidney Toxin		x

Comments: The following ingredients must be reported under section 313 of SARA - copper, phosphorus

SECTION II HAZARDOUS INGREDIENTS (CONTINUED)**SHIPPING INFORMATION**

DOT HAZARD CLASS: N/A

DOT SHIPPING NAME: N/A

SHIPPING I.D. NUMBER: N/A

SPECIAL HAZARD DESIGNATIONS

	HMIS	NFPA	HAZARD RATING
HEALTH:	0	0	0 - MINIMAL
FLAMMABILITY:	0	0	1 - SLIGHT
REACTIVITY:	0	0	2 - MODERATE
PROTECTIVE EQUIPMENT:	-	-	3 - SERIOUS 4 - SEVERE

SECTION III**PHYSICAL DATA****Melting Point:** 1981 °F (approx.)**Vapor Pressure (mm Hg):** N/A**Boiling Point:** N/A**Vapor Density (AIR=1):** N/A**Specific Gravity (H₂O=1):** 8.94**Solubility in Water:** Insoluble**Appearance and Odor:** orange-red (copper) solid with no odor**SECTION IV****FIRE AND EXPLOSION HAZARD DATA****Flash Point (method used):** N/A**LEL:** N/A **UEL:** N/A**Extinguishing Media:** N/A**Special Fire fighting Procedures:** N/A**Unusual Fire and Explosion Hazards:** N/A**SECTION V****REACTIVITY DATA****A. Stability** Stable Unstable**Conditions to Avoid:** N/A**B. Hazardous Polymerization:** May Occur Will Not Occur**Conditions to Avoid:** N/A**C. Incompatible Materials:** N/A**D. Hazardous Decomposition Products:** N/A

SECTION VI**HEALTH HAZARD DATA**

Route(s) of Entry: Inhalation Ingestion Skin

Health Hazards (Acute and Chronic):

The fittings as received do not present an inhalation, skin contact or eye contact hazard. Listed hazards may result from remelting or combustion of the fittings.

A. Metals:

Copper: Exposure to fumes or dusts may produce “metal fume fever” with flu-like symptoms including: fever, chills, aches, dry throat and nausea. Other symptoms of overexposure may include metallic taste, discoloration of the skin or hair and irritation of eyes, nose or throat.

Phosphorus: The vapors of burning phosphorus are irritating to the nose, throat and lungs. Phosphorus on contact with the skin may ignite and produce severe skin burns with blistering. Phosphorus is especially hazardous to the eyes and may produce severe damage.

B. Other Constituents:

N/A

C. Carcinogenicity: NTP IARC OSHA

None of the constituents show carcinogenicity.

D. Emergency First Aid:

Not applicable to finished fittings.

SECTION VII**SPILL OR LEAK PROCEDURES**

- A. **Special Handling or Storage:**
Keep dry if metal is to be remelted.
- B. **Spill or Leak Containment:**
Recover solid material, no environmental hazard anticipated.
- C. **Waste Disposal:**
Recycle when possible, consult state and federal regulations for landfill disposal.
- D. **Other Precautions:**
None.

SECTION VIII**SPECIAL PROTECTION INFORMATION**

- A. **Respiratory Protection (specify type):** NIOSH approved for toxic dust/ fumes if remelting
- B. **Ventilation:** Local Exhaust Mechanical (General)
Other (specify): N/A
- C. **Eye Protection:** Yes No Type: _____
- D. **Protective Gloves:** Yes No Type: _____
- E. **Other Protective Equipment or Clothing:** Yes No
Type: N/A
- F. **Special Precautions or Work Practices:** N/A

DISCLAIMER OF LIABILITY

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

PRODUCT NAME: Wrot Copper Fittings

MSDS No: FP-3

Refer to Material Safety Data Sheet for more information



NIBCO INC.
1516 Middlebury St.
P.O. BOX 1167
ELKHART, IN 46516
574-295-3000

NFPA RATING AS SHIPPED

FIRE HAZARD 4. EXTREMELY DANGEROUS AND EXPLOSION HAZARD 3. FIRE AND EXPLOSION HAZARD 2. WILL BURN AT TEMPS ABOVE 100 °F 1. WILL BURN AT TEMPS ABOVE 200 °F 0. WILL NOT BURN		
HEALTH HAZARD 4. EXTREME HAZARD - AVOID CONTACT OR BREATHING VAPOR 3. SEVERE HAZARD - USE SPECIAL CLOTHING AND MASKS 2. HAZARDOUS - USE MASKS OR SPECIAL VENTILATION 1. SLIGHTLY HAZARDOUS - IRRITATING 0. NORMAL MATERIAL	REACTIVITY HAZARD 4. EXTREME HAZARD - VACATE AREA IN CASE OF FIRE 3. SEVERE EXPLOSION HAZARD 2. VIOLENT CHEMICAL CHANGE POSSIBLE 1. UNSTABLE IF HEATED 0. NORMALLY STABLE	
<p>(RED) 0</p> <p>(BLUE) 0 (YELLOW) 0</p> <p>W USE NO WATER P POLYMERIZES</p>		
CAUTION! Welding, cutting or remelting of this product may generate toxic fumes or dust. Refer to MSDS and health hazards and target organ effects listed below.		

INGREDIENTS

Iron, silicon, manganese. See Material Safety data Sheet for a listing of minor ingredients.

STORAGE AND HANDLING

Material should be kept dry if it is to be melted to prevent steam explosion.

SARA SECT. 313 NOTIFICATION

Aluminum, chromium, copper, nickel, manganese.

<input type="checkbox"/> TOXIC <input type="checkbox"/> HIGHLY TOXIC <input type="checkbox"/> REPRODUCTIVE TOXIC	HEALTH HAZARDS <input type="checkbox"/> IRRITANT <input type="checkbox"/> CORROSIVE <input type="checkbox"/> SENSITIZER	<input type="checkbox"/> CARCINOGEN <input type="checkbox"/> _____ <input checked="" type="checkbox"/> NO KNOWN EFFECTS
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IMMEDIATE AND DELAYED HEALTH EFFECTS

<input type="checkbox"/> HEPATOXINS (LIVER DAMAGE) - jaundice, liver enlargement	<input type="checkbox"/> HEMATOPOIETICS (BLOOD DAMAGE) - cyanosis, unconsciousness	<input type="checkbox"/> CUTANEOUS HAZARDS - skin damage, rashes, irritation, defatting of skin
<input type="checkbox"/> NEPHROTOXINS (KIDNEY DAMAGE) - edema, proteinuria	<input type="checkbox"/> PULMONARY DYSFUNCTIONS (Lung Damage) - shortness of breath, chest tightness, cough	<input type="checkbox"/> EYE HAZARDS - impaired vision, conjunctivitis, corneal damage
<input type="checkbox"/> NEUROTOXINS (NERVOUS SYSTEM DAMAGE) - narcosis, behavioral changes, decrease in motor functions	<input type="checkbox"/> REPRODUCTIVE TOXINS - birth defects, sterility	<input checked="" type="checkbox"/> NONE - no known immediate or delayed effects