

**I – Identification of the Substance and of the Company**

SUPPLIER: RMO, Inc.
650 W. Colfax Ave.
Denver, CO 80204
303-592-8200

Trade Name and Synonyms -
Description: Auxiliary Welding Tip & Vise;
Begg System Insert Pins

Emergency Information Chemtrec: 800-424-9300
Chemtrec International: 202-483-7616

Product Grade / Name:
Chemical Family: **BRASS**

II – Composition / Information on Ingredients

Elements	CAS Number	% by Weight	ACGIH TLV (mg/m ³)
Copper (Cu)	7440-50-8	60-70	1 (dust & mist)
Zinc (Zn)	1314-13-2	30-40	5 (as fume)
Tin (Sn)	7440-31-5	<1	2
Lead (Pb)	7439-92-1	<4	0.05 (OSHA Lead Std.)

III – Hazards Identification

Brass products in their usual solid physical state do not constitute any physical or health hazard. However, subsequent operations such as brazing, burning, cutting, grinding, heat treating, welding, or processing in any other fashion may produce potentially hazardous dust or fume which can be inhaled, swallowed, or come in contact with the skin, eyes, or mucous membranes.

Short term exposure to fumes/dust may provide irritation of eyes and respiratory system. Inhalation of high concentrations of freshly formed oxide fumes of copper, zinc, and lead may cause metal fume fever characterized by metallic taste in the mouth, dryness and irritation of the throat and influenza-like symptoms.

Inhalation or ingestion of lead particles may result in lead-induced systemic toxicity.

Symptoms of lead poisoning include abdominal cramps, anemia, muscle weakness, and headache. Prolonged exposure can cause behavioral changes, kidney damage, CNS damage, and reproductive effects.

Exposure to dust or fumes can cause eye, skin and respiratory tract irritation. Contains a material which may cause blood, kidney, reproductive and neurological effects.

Contains a material which may cause cancer. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

IV – First Aid Measures

Inhalation	Remove to fresh air. If condition continues, consult a physician.
Eye Contact	Flush with water for at least 15 minutes; obtain medical attention.
Skin Contact	Wash with soap and water. Seek medical attention if condition persists.
Ingestion	If significant amounts of metal are ingested, consult physician.

V – Fire Fighting Measures

Flash Point: N/A

Auto Ignition Temperature: N/A

Flammable Limits in Air: N/A

Extinguishing Media: N/A

Fire and Explosion Hazards: Brass products in the solid state present no fire or explosion hazards. Dust may cause an ignitable and/or an explosive atmosphere. For localized powder fires, smother with dry sand, dry dolomite, sodium chloride or soda ash.

VI – Accidental Release Measures

Solid forms can be removed by mechanical means. In dust form, this product may be an explosion hazard. Remove all sources of ignition. Dust or fume may be suppressed by the use of a local exhaust system.

VII – Handling and Storage

Store in a dry environment. Avoid moisture. Avoid dispersion of dust in air.

VIII – Exposure Controls / Personal Protection

Respiratory Protection: NIOSH/MSHA approved dust and fume respirator should be used to avoid excessive inhalation of particulates when exposure exceeds TLV's.

Eyes and Face: Safety glasses or goggles should be utilized as required by exposure.

Hands, Arms, Body: Protective gloves should be worn as required for welding, burning or handling operations.

Clothing: As required depending on operations and safety codes.

IX – Physical and Chemical Properties

Material: Solid

Appearance and Odor: Gold/Yellow, odorless

Acidity/Alkalinity pH: N/A

Melting Point: 1600 °F

Boiling Point: N/A

Specific Gravity (H₂O = 1): >8

Solubility in Water: N/A

Vapor Pressure: N/A

X – Stability and Reactivity

Stability:

Unstable () Stable (X)

Conditions to Avoid: Exposure to strong acids, bases or oxidizing agents.

Incompatibility:

Material to Avoid: Mercury, ammonia, acetylene, acids, chlorine,

Hazardous Decomposition Products:

Toxic gases, aerosols, and vapors may be released in a fire involving copper alloys if fumes of other compounds or other contacting materials are involved. If heated and fumes are generated, zinc oxide fumes could be formed. The ACGIH TLV and OSHA PEL for zinc oxide fume is 5 mg/m³.

Hazardous Polymerization:

May Occur () Will Not Occur (X)

XI – Toxicological Information

The finished alloy metal in solid form is not hazardous. Dust or fume: Carcinogen, irritant, lung, blood, kidney, reproductive and developmental toxin, neurotoxin.

Potential exposure routes for dust: ingestion, inhalation, and eye contact. Potential exposure routes for fume: inhalation and eye contact.

Inhalation or ingestion of lead particles may result in lead-induced systemic toxicity.

Symptoms of lead poisoning include abdominal cramps, anemia, muscle weakness, and headache. Prolonged exposure can cause behavioral changes, kidney damage, CNS damage, and reproductive effects.

Acute Animal Toxicity Data:

For Product: (dust or fume):		For Components:		
		Copper	Lead	Zinc
Oral LD ₅₀	Believed to be moderately toxic	3.5 mg/kg (mouse, intraperitoneal)	No data	No data
Dermal LD ₅₀	Believed to be > 2 g/kg	375 mg/kg (rabbit, subcutaneous)	No data	No data
Inhalation LC ₅₀	Believed to be slightly to moderately toxic	No data	No data	No data
Irritation	Believed to be an eye and respiratory irritant	Respiratory irritant	Not irritating	Eye irritant

Sub-chronic/Chronic Toxicity: No information for product. Lead has caused blood, kidney, and nervous system damage in laboratory animals.

Carcinogenicity: This product is not known or reported to be carcinogenic. The International Agency for Research on Cancer (IARC) lists lead as possibly carcinogenic to humans, group 2B.

Mutagenicity: This product is not known or reported to be mutagenic. Lead has been shown to be mutagenic in several in vitro assays.

Reproductive, Teratogenicity, or Developmental Effects: This product is not known or reported to cause reproductive or developmental effects. Lead has been shown to affect fetal development, including birth defects and reduce male reproductive function in laboratory animals.

Neurological Effects: This product is not known or reported to cause neurological effects. Lead has caused peripheral and central nervous system damage and behavioral effects in laboratory animals.

Interactions with other Chemicals which Enhance Toxicity: None known or reported.

XII – Ecological Information

No data is available on this product. Individual constituents are as follows:

Copper: The toxicity of copper to aquatic organism varies significantly not only with the species, but also with the physical and chemical characteristics of the water, such as its temperature, hardness, turbidity and carbon dioxide content. Copper concentrations varying from 0.1 to 1.0 mg/1 have been found by various investigators to be not toxic for most fish. However, concentrations of 0.015 to 3.0 mg/1 have been reported as toxic, particularly in soft water to many kinds of fish, crustaceans, mollusks, insects, and plankton.

Lead: LC₅₀ (48 hours) to bluegill (*leptomis macrochirus*) is reported to be 2-5 mg/1. Lead is toxic to waterfowl. Dissolved lead may migrate through soil. Lead may persist and accumulate in the environment.

XIII – Disposal Considerations

Dispose of in accordance with Federal, State and Local Regulations. This product may be a candidate for metal reclamation.

XIV – Transportation Information

Technical Shipping Name: Not regulated

Freight Class Bulk: N/A

Freight Class Package: N/A

Product Label: N/A

Hazard Class or Division: Non-Hazardous

Hazard Class Division Number: Not Hazardous by D.O.T. Regulations

XV – Regulatory Information

TSCA The components of this product are listed on the toxic substance control act inventory.

CERCLA Zinc, R.Q. = 1000 lbs.; Copper, R.Q. = 5000 lbs.; Lead, R.Q. = 10 lbs. No reporting is required if diameter of the piece of metal is equal to or exceeds 100 micrometers (0.004 inches).

SARA 313 Copper, Zinc (fume or dust), Lead

SARA 313	Health: for	Acute – Yes;	Fire: None	Reactivity:	Release of
Hazard Class	dust or fume	Chronic –		None	Pressure:
	only	yes			None

SARA 302 None of the components of this product are listed.

EHS List

R.Q. = Reportable Quantity

XVI – Other Information

Note: While the information and recommendations set forth on this data sheet are believed to be accurate as received from our suppliers, RMO, Inc. makes no warranty with respect thereto and disclaims all liability from reliance thereon.