

MATERIAL SAFETY DATA SHEET

Updated 12/96

PHOTOSENSITIZED COPPER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Photosensitized Copper Additional Name: Coated Copper

General Use: To make copper photoengraving dies.

Company: UEI™ Systems, A Division of Universal Engraving, Inc.
9090 Nieman Road Overland Park, KS, USA 66214
1-800-821-8864 or 913-599-0244EMERGENCY CONTACT: 1-800-424-9300 United States and Canada
703-527-3887 International

2. COMPOSITION

	%	CAS #	OSHA PEL	ACGIH TLV	NA
Copper	99.9	7440-50-8	NA	NA	NA
Silver	0.05-0.1	7440-22-4	0.01 mg/m3	0.1 mg/m3	
Novolac (polymer)		9003-35-4			
Diazo sensitizer (aromatic amine)		Not Established			

3. HAZARDS IDENTIFICATION

Sheet of orange metal with blue to green coating on one side.

Routes of Entry: Ingestion and inhalation.

Health Hazards (Acute and Chronic):

Ingestion: Irritation to the lining of the stomach and intestines. Dry burning throat and metallic taste.

Inhalation: Lung changes potentially leading to pulmonary diseases.

Skin and Eye Contact: Mechanical irritation.

Systemic/Other Effects: Headach, muscle aches, cough, chest tightness/pain, nausea, chills, and fever.

Carcinogenicity: NA

4. FIRST AID

Inhalation: Remove the victim to fresh air and call a physician.

Ingestion: Do Not induce vomiting. Call a physician.

Skin: Flush thoroughly with water.

Eye: Flush thoroughly with water and call a physician.

System and other potential health risks: Call a physician.

5. FIRE AND EXPLOSION HAZARD DATA

Flash Point: Not available. Flammable Limits: Not available.

Extinguishing Media: Dry sand or metal extinguishing powders

Special Fire Fighting Procedures: Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in the fire.

Fire and Explosion Potential: Do not use water on molten metals. Grinding or other machining operations can produce fine particulate dust which may explode in the presence of a strong ignition source.

6. ACCIDENTAL RELEASE MEASURES

Clean up in a manner which minimizes exposure, especially to dust from product. Vacuuming is preferred for clean up of product dust. Use respiratory protection if necessary to minimize exposure to dust or fumes.

7. STORAGE, HANDLING, AND USE PROCEDURES

Store and use away from heat and light. Avoid inhalation and ingestion of dust, fumes, and/or mist. Practice good housekeeping and personal hygiene. Avoid creating airborne dust when cleaning up dust from product. Waste is usually collected and recycled to recover copper value. If disposal is necessary follow all local, state, and federal regulations. Storing in an area with non-direct light helps maintain diazo stability.

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8. PERSONAL PROTECTION INFORMATION

Respiratory Protection: NIOSH/MSHA approved respirator for toxic dust, fume, and/or mist.

Ventilation: Exhaust dust, mist, and/or fumes at source if threshold limit values are exceeded.

Skin Protection: Protective gloves approved for the specific operation.

Eye Protection: Safety glasses or face shield.

Other Equipment: As required for the work done on or with the metal. Steel-toed shoes are recommended.

9. PHYSICAL AND CHEMICAL DATA

Boiling Point: 2324° C

Evaporation Point: NA

Solubility in water: Negligible

Vapor Density: NA

pH: NA

Vapor Pressure: 1 mm Hg @ 1628° C

Melting Point: 1976-1981° F

Specific Gravity: Approximately 8.89-8.94

Appearance/Physical State: Orange metal with no odor/Solid.

Viscosity: NA

10. CORROSIVITY AND REACTIVITY DATA

Stability: Stable Conditions to avoid: Strong acids, bases, or oxidizing agents (during storage). Heat, sparks, open flames, and direct light.

Incompatibility: Hydrogen peroxide, mercury, ammonia, acetylene, chlorine, halogenates of barium, calcium, magnesium, potassium, sodium, and zinc.

Hazardous Decomposition Products: Temperatures above melting point may evolve metallic oxide fumes.

Hazardous Polymerization: Will not occur.

11. OTHER INFORMATION

UEI™ Systems provides the information contained herein in good faith. It is believed to be correct. However it is not all inclusive and should be used only as a guide. Individuals receiving this information must exercise their independent judgement in determining its appropriateness for a particular purpose. UEI™ Systems shall not be held liable for any damage resulting from handling or from contact with this product.

Abbreviations: PEL - Permissible Exposure Limit
TLV - Threshold Limit Value
NA - Not Applicable
F - Fahrenheit
C - Celsius