



MATERIAL SAFETY DATA SHEET

VENDEE AND THIRD PERSONS ASSUME THE RISK OF INJURY PROXIMATELY CAUSED BY THIS PRODUCT IF REASONABLE SAFETY PROCEDURES ARE NOT FOLLOWED AS PROVIDED FOR IN THE DATA SHEET, AND VENDOR SHALL NOT BE LIABLE FOR SUCH INJURY. FURTHERMORE, VENDOR SHALL NOT BE LIABLE FOR INJURY TO VENDEE OR THIRD PERSONS PROXIMATELY CAUSED BY ANY ABNORMAL USE OF THIS PRODUCT EVEN IF REASONABLE SAFETY PROCEDURES ARE FOLLOWED. ALL PERSONS USING THIS PRODUCT, ALL PERSONS WORKING IN AN AREA WHERE THIS PRODUCT IS USED, AND ALL PERSONS HANDLING THIS PRODUCT SHOULD BE FAMILIAR WITH THE CONTENTS OF THIS DATA SHEET. POSTING THIS DOCUMENT FOR EMPLOYEE NOTIFICATION IS RECOMMENDED BY THE VENDOR.

N. E. P. A.



I. PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	Quemetco, Inc.	TELEPHONE #	(214)631-6070 (317)247-1303
ADDRESS	7870 West Morris Street, Indianapolis, Indiana 46231-1365		
TRADE NAMES	Hard Lead; Sb, Sn		
SYNONYMS	Antimonial Tin Lead Alloy	INTENDED USE	Industrial

II. INGREDIENTS

MATERIAL OR COMPONENT (CAS#)	WEIGHT		OSHA		ACGIH		Other
	%	PEL/TWA	Ceiling	TLV/TWA	TLV/STEL		
Lead (CAS #7439-92-1)	88-100	50µg/m³	None	0.15mg/m³	None	30µg/m³	Action Level
Antimony (CAS #7440-36-0)	0.5-10	0.1mg/m³*	None	0.2mg/m³*	None		Not Applicable
Tin (CAS #7440-31-5)	0-1.3	2mg/m³	None	2mg/m³	None		Not Applicable

* Fume

III. PHYSICAL DATA

BOILING POINT @ 760 mm Hg	Greater than 3164°F (1740°C)	MELTING POINT	486-621°F (252-327°C)
SPECIFIC GRAVITY (H ₂ O = 1)	9.6-11.3 Approx.	VAPOR PRESSURE	Negligible
VAPOR DENSITY (Air = 1)	Not Applicable	SOLUBILITY IN H ₂ O (% by wt.)	Insoluble
% VOLATILE BY VOLUME	Negligible	EVAPORATION RATE (Butyl Acetate = 1)	Negligible
COEFF. WATER/OIL DISTRIBUTION	Not Applicable	pH	Not Applicable, Insoluble in Water
FREEZING POINT	621°F (327°C)	ODOR THRESHOLD	Not Applicable
APPEARANCE AND ODOR	Bluish-gray metal; no apparent odor		

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: OSHA PEL - TWA 1.0 mg(Cu)/m³ (dust or mist), ACGIH TLV - TWA 0.2(Cu)/m³ (fume).

EFFECTS OF OVEREXPOSURE: Under normal handling and use, exposure to massive forms of copper represents very few hazards. Particulates generated from the use of this substance may pose some health risks. Acute exposure will cause irritation to the eye; foreign body reaction causes chalcosis. Prolonged and repeated exposure to the skin will cause irritation or discoloration. Acute exposure will cause primary gastrointestinal symptoms with nausea and vomiting, abdominal pain and diarrhea. In severe cases headache, sweating, kidney and liver and central nervous system damage progressing to convulsions, coma and possible death (rarely). Inhalation symptoms consist primarily of irritation. Cases of "metal fume fever" have been reported.

EMERGENCY AND FIRST AID PROCEDURES: EYES: Flush with water for 15 minutes. SKIN: Wash contaminated skin and remove contaminated clothing.

INHALATION: Remove individual from exposure; place individual under care of physician. **INGESTION:** Induce vomiting in conscious individual.

MEDICAL ATTENTION IN THE EVENT OF ANY ACCIDENTAL EXPOSURE TO THIS PRODUCT: See first aid section for more information.

CARCINOGENICITY INFORMATION: Not listed as a carcinogen TSCA listed.

SECTION VI - REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY (MATERIALS TO AVOID): At temperatures above melting copper oxide fumes may be formed.

HAZARDOUS DECOMPOSITION PRODUCTS: Contact with mineral acids will release hydrogen - a dangerous gas.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID:

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: If copper is spilled, it can be safely swept, shoveled or picked up by hand and returned to original container. Keep dust at a minimum.

WASTE DISPOSAL METHOD: Place in an approved container and dispose of in accordance with Federal, State, and Local laws.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): Approved respirator for dust or fumes.

VENTILATION: The area surrounding any plating tank should be suitably ventilated to prevent gases, mists, and particulate matter evolved from the plating tank from collecting to injurious levels. Maintain work environment below the recommended exposure limits.

PROTECTIVE GLOVES: Rubber or Leather

EYE PROTECTION: If copper metal is converted to particulates, avoid contact with eyes by appropriate safety goggles or glasses with full side shield.

OTHER PROTECTIVE EQUIPMENT: Protective coveralls and safety footwear.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep away from reactive products.

OTHER PRECAUTIONS: No other precautions are expected to be necessary.

SECTION X - OTHER REGULATORY INFORMATION

Ingredients in this product are TSCA listed.

Ingredients in this product are CDS listed.