

# MATERIAL SAFETY DATA SHEET

## SECTION I

**MANUFACTURER'S NAME:** LAMB & RITCHIE COMPANY INC.  
**ADDRESS:** 90 BROADWAY, SAUGUS, MA 01906  
**EMERGENCY PHONE NO.:** 781-941-2700  
**CHEMICAL NAME AND SYNONYMS:** COPPER, LEAD  
**TRADE NAME AND SYNONYMS:** LEAD COAT, COPPER, LEAD Pb COATED COPPER  
LEAD COATED COPPER SHEETS  
**CHEMICAL FAMILY:** COPPER

## SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	CAS NO.	OSHA-PEL/ACGIH-TLV
*COPPER BASE METAL	99.9	7440-50-8	FOR EXPOSURE LEVELS SEE SECTION V
*LEAD COATING	15 LBS. MAX PER 100 FT <sup>2</sup> OF COPPER SURFACE	7439-92-1	

**HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS OR GASES:** If exposure to copper dust/fume is kept below Permissible Exposure Limits (PEL)/Threshold Limit Value (TLV) all trace elements should not pose any health risk.  
\*Chemical(s) listed as a toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

## SECTION III - PHYSICAL DATA

Melting Point: Copper 1949° F, Lead 621° F  
Vapor Pressure (mm Hg.) Not Applicable  
Solubility in Water: Negligible  
Specify Gravity (H<sub>2</sub>O = 1) Copper 8.9, Lead 11.0

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method used) Not Applicable \*  
Extinguishing Media Not Applicable  
Special Fire Fighting Procedures Not Applicable  
Unusual Fire and Explosion Hazards Not Applicable

**\*Under normal conditions. Heavy concentrations of fine copper dust may cause flash fire if exposed to ignition source.**

## SECTION V - HEALTH HAZARD DATA

**EXPOSURE LEVELS:** Copper dust and mists - OSHA (PEL): TWA = 1 mg/m<sup>3</sup>. ACGIH (TLV): TWA = 1 mg/m<sup>3</sup>.  
Copper fumes - OSHA (PEL): TWA = 0.1 mg/m<sup>3</sup>. ACGIH (TLV): TWA = 0.2 mg/m<sup>3</sup>.  
Lead - OSHA (PEL): TWA = 50 micrograms/m<sup>3</sup>. ACGIH (TLV): TWA = 0.15 mg/m<sup>3</sup>.

**CARCINOGENICITY:** Not listed as a carcinogenic in NTP, IARC Monographs, or OSHA.

**EFFECTS OF OVEREXPOSURE:** Lead - (chronic) - can cause lead poisoning, characterized by abdominal pain. Lead is a toxic and hazardous substance regulated by 29 CFR Section 1910.1025, pallor, weakness, loss of weight, fatigue, malnutrition.  
Copper fumes and dust (acute) sneezing, cough, congestion, nausea, metallic tastes, irritation of upper respiratory tract, chills, fever.

**EMERGENCY FIRST AID PROCEDURES:** Skin: Flush thoroughly with water.  
Eyes: Flush with water, call Physician.  
Ingestion: Drink water, induce vomiting, call Physician.  
Inhalation: Remove victim to fresh air, call Physician.  
Copper fume, dusts and mists are listed by OSHA as air contaminants (29 CFR 1910.1000 Sub-part Z)

**PRIMARY ROUTE(S) OF ENTRY:** Inhalation/ingestion.

**WARNING:** This product contains lead, a chemical known to the State of California to cause cancer, birth defects and other reproductive harm (California Health & Safety Code Section 25249.5 et seq.).

## SECTION VI - REACTIVITY DATA

**STABILITY:** Stable

**INCOMPATIBILITY:** (Material to avoid): Dust and fumes: acetylene, chlorine - Metals: acids and oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Copper fumes/dust. Lead fumes/dust.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## SECTION VII - SPILL OR LEAK PROCEDURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Dust or fume: wear respirator, follow OSHA use instructions, shovel up, or vacuum and place in approved DOT container and seal. Wash contaminated clothing.

**WASTE DISPOSAL METHOD:** Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Follow federal, state and local regulations for disposal.

## SECTION VIII - SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION (DUST/FUME):** Dust or fume: NIOSH/MSHA approved, dust/fume respirator.

**VENTILATION (DUST/FUME):** Local exhaust - if exposure levels exceeded.

**EYE PROTECTION (DUST):** Goggles.

## SECTION IX - SPECIAL PRECAUTIONS

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Avoid breathing dust or fumes. Do not take internally. Do not eat or smoke while handling material. Wash hands. Preclude from exposure to fume and dust those individuals with diseases of central nervous system, kidneys and blood.