



MATERIAL SAFETY DATA SHEET



SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: M-Line 450-20S Solder

April 13, 2010

Vishay Measurements Group, Inc.
Post Office Box 27777
Raleigh, NC 27611

919-365-3800

CHEMTREC 1-800-424-9300 (U.S.)
703-527-3887 (Outside U.S.)

NOTE: CHEMTREC numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

CAS NUMBER	CHEMICAL IDENTITY	%
7440-31-5	Tin	95.0
7440-36-0	Antimony	5.0

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

Inhalation: YES Skin: NO Ingestion: Accidental

Health Hazards (Acute and Chronic): None known.

Carcinogenicity: NTP: Not listed
 IARC Monographs: Not listed
 OSHA Regulated: Not listed

Signs and Symptoms of Exposure:

INHALATION: None known.

EYE CONTACT: None known.

SKIN CONTACT: None known.

INGESTION: None known.

Conditions Generally Aggravated by Exposure: Pre-existing conditions of the lungs, diseases of the blood and blood-forming organs, kidneys, nerves and possibly reproductive system.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove to fresh air.

EYE CONTACT: For burns, flush immediately with cool water.

SKIN CONTACT: For burns, flush immediately with cool water.

INGESTION: Seek medical attention.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A

Flammable limits: LEL: N/A UEL: N/A

Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Special Firefighting Procedures: None.

Unusual Fire and Explosion Hazards: None.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Melted solder will solidify on cooling and can be scraped up. Use caution to avoid breathing fumes if a gas torch is used to cut up large pieces.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: Usually not required. When ventilation is not sufficient to remove fumes from the breathing zone, a NIOSH approved respirator should be worn.

Ventilation: Provide adequate exhaust ventilation (general and/or local) if necessary to meet exposure requirements. Local exhaust ventilation is preferred to minimize dispersion of smoke and fumes into the work area.

Protective Gloves: Usually not required.

Eye Protection: When soldering, use goggles or face shield.

Other Protective Clothing or Equipment: None.

Work / Hygienic Practices: Wash hands after using and before eating, drinking or smoking.

SECTION 8: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Store away from sources of sulfur. Avoid breathing fumes during soldering.

Other Precautions: Empty containers may contain product residue. Observe all label precautions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	N/A
Vapor Pressure (mmHg):	N/A
Vapor Density (Air = 1):	N/A
Specific Gravity (H₂O = 1):	>1
Melting Point:	N/A
Evaporation Rate (BuAc = 1):	N/A
Volatile Organic Compounds:	N/A
Solubility in Water:	Insoluble

Appearance and Odor: Silver-gray metal in wire shape.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable under normal conditions of use and storage.

Conditions to Avoid: None.

Incompatibility (Materials to Avoid): Strong acids, strong oxidizers.

Hazardous Decomposition or By-products: Solder containing antimony may liberate antimony oxide if heated above 1000°F.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Tin

OSHA PEL:	2.0 mg/m ³
ACGIH TLV:	2.0 mg/m ³
OTHER:	N/E

Antimony

OSHA PEL: 0.5 mg/m³
ACGIH TLV: 0.5 mg/m³
OTHER: LD₅₀ INGESTION (RAT) 7.0 g/kg

SECTION 12: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Solder is reclaimable. Disposal should be in accordance with local, state and federal regulations.

SECTION 13: TRANSPORTATION INFORMATION

SHIPPING NAME	CLASS	UN NUMBER
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Not required -- Shipped as non-hazardous article.

SECTION 14: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION:

This product contains a toxic chemical or chemicals (as listed below) subject to the reporting requirements of Section 313 Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

CAS NUMBER	CHEMICAL NAME	% BY WEIGHT
7440-36-0	Antimony	5.0

TSCA NOTIFICATION:

All components of this product are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).

SECTION 15: OTHER INFORMATION

To the best of our knowledge, the information provided above meets the requirements of the United States Occupational Safety and Health Act and regulations established under 29 CFR 1910.1200 (g)(2)(c)(1)-(4) for a mixture of hazardous chemicals which has not been tested as a whole. The data provided on this Material Safety Data Sheet is from manufacturers of the original components. Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.