

**MATERIAL SAFETY DATA SHEET**  
**95/5 TIN-ANTIMONY LEAD FREE MULTIPURPOSE ELECTRONIC SOLDER**

**Trade Name:** 95/5 Tin Antimony Lead Free Multipurpose Electronic Solder  
**Composition:** 95% Tin/5% Antimony  
**Manufacturer:** Weldcote Metals, Inc.  
**Address:** 842 Grove Rd. Kings Mountain, NC 28086  
**Telephone:** 704-739-4115      **Fax:** 704-739-6116      **E-Mail:** [info@weldcotemetals.com](mailto:info@weldcotemetals.com)  
**Emergency:** Chemtrec 1-800-424-9300

Please retain this sheet for your files. Weldcote Metals maintains a file of Material Safety Data Sheets (MSDS) for each alloy produced in compliance with Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) & various right-to-know laws.

The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to Weldcote Metals, Inc. at the time of issue. The information contained on this sheet is intended solely for employee health and safety education and not for contract specification purposes. No warranty, guarantee, or representation is made by Weldcote Metals, Inc., nor does Weldcote Metals, Inc. assume any responsibility in connection therewith; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances. Should you need additional information, contact us.

**SECTION I: MATERIAL IDENTIFICATION/COMPONENTS**

\*(Hazardous components 1% or greater; Carcinogens 0.1% or greater)

Component	CAS No.	OSHA PEL	ACGIH TLV	Density (lbs./ft <sup>3</sup> ):	%(optional)
Tin (Sn)	7440-31-5	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	.264	95
Antimony (Sb)	7440-36-0	.5 mg/m <sup>3</sup>	.5 mg/m <sup>3</sup>	.240	05

No other Hazardous material is present in concentrations greater than 1% (0.1% for Carcinogens)

**SECTION II: PHYSICAL/CHEMICAL CHARACTERISTICS**

**Boiling point:** >2200°F      **Melting Range:** 450-464°F-232-240°C  
**Vapor Pressure (mm Hg):** NA      **Vapor Density: (AIR = 1):** NA  
**Specific Gravity:** .264      **Solubility in Water:** 0(solid)  
**Evaporation Rate (Butyl Acetate = 1):** NA  
**Appearance and Odor:** Lustrous, silver metal; odorless/various shapes and sizes.

**SECTION III. FIRE AND EXPLOSION HAZARD DATA**

**Extinguisher Media:** CO<sub>2</sub> or dry chemical extinguisher.  
Do not use water on molten metal.  
Large fires may be flooded with water from a distance.  
**Special Fire Fighting Procedures:** Use NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing  
If involved in fire.  
**Unusual Fire and Explosion Hazards:** Finely divided dust may form explosive mixture with air. Never drop water or liquids into Molten Solder.

#### SECTION IV: REACTIVITY HAZARD DATA

**Stability:** Stable

**Conditions to avoid:** None

**Incompatibility (materials to avoid):** Strong Acids, Strong Alkalis

**Hazardous Decomposition Products:** None-Hazardous Polymerization will not occur

#### SECTION V: HEALTH HAZARD

**Primary Routes of Entry**

**Inhalation:** Fumes

**Ingestion:** Solid Metal-not edible

**Skin Absorption:** N/A

**Signs and Symptoms of Overexposure:**

Possible flu-like symptoms (nausea, constipation, headache, dizziness) – self-limiting, usually disappears within 24 hours.

#### SECTION VI: EMERGENCY AND FIRST AID PROCEDURES

**Ingestion:** Drink large quantities of water- induce vomiting. Call a physician at once; advise of chemical composition (section II).

**Skin:** Wash thoroughly with water to remove all residue. If a rash develops, call a physician.

**Inhalation:** Terminate exposure & remove to fresh air. Call physician, advise of chemical composition (section II)

**Eyes:** Flush with water for at least 15 minutes to remove irritant. Consult a physician.

#### SECTION VII: EFFECTS OF ACUTE EXPOSURE

**Tin (Sn):** Elemental tin is not generally considered to be toxic.

**Antimony:** NAIF

Note: It is unlikely that normal exposure to this solder, while using appropriate protective equipment, would result in illness.

#### SECTION VIII: CONTROL AND PROTECTIVE MEASURES

**Respiratory Protection:** Use NIOSH-approved breathing apparatus to prevent exposure to dusts/fumes.

**Eye Protection:** Wear approved safety glasses or welding goggles, appropriate to your procedure.

**Ventilation:** Local exhaust: Yes Mechanical: Yes Special: Conform with your regulatory statutes.

**Protective gloves are recommended:** Especially for high temperature applications to prevent burns.

**Other:** Standard protective equipment used in soldering operations. Conform to all local, state, and federal regulations.

#### SECTION IX: PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES

**Steps to be taken if material is spilled or released:** Solder is solid/recyclable. Vacuuming is recommended for accumulated metal dust from saw/grind operations.

**Waste disposal method:** According to Federal, State, Local & OSHA Regulations.

**Precautions to be taken in handling and storage:** Dry storage; Ambient temperature.

**Other Precaution/Special Handling:** Wet or moist ingots will present a steam explosion hazard when submerged in molten solder. Avoid fire and explosion risks. Always preheat ingot before charging into furnace.

\*0=Insignificant

1= Slight

2=Moderate

3=High

4=Extreme

NFPA Rating:

Health: 1

Flammability: 0

Reactivity: 0

Special: 0

HMIS Rating:

Health: 1

Flammability: 0

Reactivity: 0

Special: 0

**SECTION X: OPTIONAL INFORMATIONAL**

**Department of Transportation:**

**Proper Shipping Name:** Solder Wire-not regulated

**Hazard Class:** NAIF

**ID & Packing Group Number:** NAIF

**TOXIC SUBSTANCE CONTROL ACT: \*DOES NOT APPLY TO TIN ANTIMONY ALLOY**

**SARA TITLE III PROGRAM:**      CHEMICAL NAME      CAS NO.      CONCENTRATION

This product contains the following

Toxic chemicals subject to the

Reporting requirements of

EPCRA of 1986 and 40 CFR 372

**\*This information must be included in all MSDS that are copied and distributed for this material.**