



MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Rev. 04/06/2010

95% Sn/5%Sb LEAD-FREE ALLOY

1. PRODUCT INGREDIENTS

Chemical Name	CAS No.	Weight %	Permissible Air Concen. (mg/cu.m.)OSHA	Permissible Air Concen. (mg/cu.m.)ACGIH	SARA Title III Sect. 313 Chem.
Tin	7440-31-5	95	2.0	2.0	NO
Antimony	7440-36-0	5	.5	.5	YES

2. PHYSICAL DATA

Material is	Appearance/Odor	Melting Point	Boiling Point	Specific Gravity	Solubility in Water
Solid	Silver –White Metal, Odorless, various shapes & sizes	460°F	<1700°C	7.9	Insoluble

3. FIRE AND EXPLOSION DATA

NFPA Codes	HMIS Codes	Unusual Fire/Explosion Hazards	Fire Extinguishing Agents Recom.	Fire Extinguishing Agents to Avoid	Fire Fighting Precautions
Health: 1 Flammability: 0 Reactivity: 0 Other: 0	Health: 1 Flammability: 0 Reactivity: 0 Other: 0	In extremely high temp fire or in contact with certain acids, may	Use CO ₂ or dry chemical on surrounding fire	Do not use water on fire where molten metal is present	Use NIOSH/MSHA approved self- contained

emit toxic fumes. Use self contained respiratory system.

breathing apparatus and full body protective clothing

4. HEALTH HAZARD INFORMATION

Primary Routes of Entry: Inhalation

Carcinogenicity: This product has not been listed as a suspect carcinogen by NTP, IARC or OSHA. This product contains less than .02% lead

Acute Overexposure (symptoms and effects): Severe short-term overexposure may lead to central nervous system disorders characterized by fever, chills and body ache. It should be recognized that exposure of this magnitude in an industrial environment is extremely unlikely.

Chronic Overexposure: Prolonged exposure to fumes of molten metal or flux used during soldering operation may cause irritation of the respiratory tract.

Medical Conditions possibly aggravated by exposure: The symptoms of impaired pulmonary functions or illness may be worsened by fume irritants.

First Aid Procedures: *Inhalation:* Remove from exposure and call a physician. *Skin Contact:* Wash affected areas with soap and water. If burns should occur from molten metal, treat for burn and get immediate medical assistance. *Eye Contact:* Flush eyes with water for 15 minutes; call a physician. *Ingestion:* Ingest large quantities of water; call a physician.

5. PRECAUTIONS/PROCEDURES

Overheating of alloy can produce metal fumes and oxides. Machining operations such as grinding, sawing or buffing can generate airborne particulates in the work area. Exposure levels indicated in section 1 are relevant to these and other operations.

Normal Handling: Use of approved respirators is required for applications where adequate ventilation cannot be provided. Activities which generate excessive dust or fumes should be avoided.

Spill or Leak: Any method that keeps dust to a minimum is acceptable. Vacuuming is preferred. Use of approved respiratory protection where possibility of dust/fume exposure exists. Do not use compressed air for cleaning.

Personal Hygiene: Avoid inhalation or ingestion. Practice good housekeeping and personal hygiene procedures.

Engineering Controls: Local exhaust ventilation is recommended for dust and/or fume generation operations where airborne exposures may exceed permissible air concentrations.

Storage: General storage procedures acceptable

6. PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use NIOSH/MSHA approved respirators or air supplied respirator when soldering in a confined space or where local exhaust or ventilation does not keep exposure below TLV.

Eyes and Face: Safety glasses recommended where the possibility of getting dust particles in eyes exists or when handling molten metal.

Other Clothing and Equipment: Gloves and other protective clothing recommended to protect skin from contact with molten metal

7. REACTIVITY DATA

Stability: STABLE

Conditions to Avoid: Not Applicable

Incompatibility: Avoid strong acids, sulfur, and chlorine

Hazardous Decomposition Products: Reaction with strong acids can produce toxic organic or inorganic tin compounds

8. ENVIRONMENTAL

Regulated by DOT? No

Waste Disposal Method: Tin as a pure metal and tin/copper /silver/antimony alloys present no problem for disposal and are, in fact, recovered due to their economic value.

9. ADDITIONAL INFORMATION

Precautions to be taken in handling and storing: None

Other Precautions: None

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