

IDENTITY: Solder Alloys (Non-lead)

Section I – Manufacturer Information

Litton/Kester Solder
515 East Touhy Avenue
Des Plaines, IL 60018

Telephone Number for Information:
(708) 297-1600
Date Prepared: June 1, 1992

EMERGENCY NUMBER: (800) 424-9300 (Chemtrec)

Section II – Hazard Ingredients/Identity Information

<u>CHEMICAL NAME</u>	<u>CAS Number</u>	<u>OSHA (PEL)</u>	<u>ACGIH (TLV)</u>
Indium	7440-74-6	0.1 mg/m ³	0.1 mg/m ³
Tin	7440-31-5	2 mg/m ³	2 mg/m ³
Silver (Sara III)	7440-22-4	0.01 mg/m ³	0.01 mg/m ³
Bismuth	7440-69-9	N/K (FP N)	N/K (FP N)
Antimony (Sara III)	7440-36-0	0.5 mg/m ³	0.5 mg/m ³
Copper (Sara III)	7440-50-8	0.1 mg/m ³	0.2 mg/m ³

Section III – Physical/Chemical Characteristics

Boiling Point: N/A
Vapor Pressure: N/A
Vapor Density: N/A

Specific Gravity: >1 (H₂O=1)
Melting Point: N/A
Evaporation Rate: Not applicable

Solubility in Water: 0

Appearance and Odor: Silver-gray metal in bar, wire, ribbon or preformed shapes.

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used): Not applicable (TOC)
LEL: N/A

Flammable Limits:
UEL: N/A

Extinguishing Media: Media suitable for surrounding fire (FP N).

Special Fire Fighting Procedures: Use NIOSH/MSHA approved SCBA and full protective equipment (FP N).

Unusual Fire and Explosion Hazards: Flux in cored solder may ignite when solder melts in a fire.

Section V – Reactivity Data

Stable or Unstable? Stable

Conditions to Avoid: None

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

Hazardous Decomposition or Byproducts: Solder containing antimony may liberate antimony oxide if heated above 100°F.

Hazardous Polymerization May Occur or Will Not Occur? Will Not Occur

Conditions to Avoid: Not relevant

Section VI – Health Hazard Data

Routes of Entry

Inhalation: Yes

Skin: No

Ingestion: No

Eye: Yes

Carcinogenicity:

NTP: No

IARC Monographs: No

OSHA Regulated: No

Health Hazards: Primary exposure during soldering is to flux fumes.

Signs and Symptoms of Exposure: None specified by manufacturer.

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

Emergency and First Aid Procedure:

Inhalation – Move to fresh air. Support breathing – give oxygen or artificial respiration.

Ingestion – Call doctor immediately!

Skin – For burns flush immediately with cool water.

Eyes – For burns flush immediately with cool water for at least 15 minutes.

Section VII – Precautions for Safe Handling and Use

Steps to be Taken in Case 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.

Waste Disposal Method: Comply with local, state and federal regulations. Solder can be reclaimed.

Precautions to be Taken in Handling and Storing: Store away from sources of sulfur. Avoid breathing fumes during soldering. Do not place flux-cored solder into a hot solder pot because flux may ignite.

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

Section VIII – Control Measures

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

Ventilation

Local Exhaust: to meet TLV requirements

Mechanical:

Special:

Other:

Protective Gloves: Impervious gloves

Eye Protection: ANSI approved chemical workers goggles.

Other Protective Clothing or Equipment: None

Work/Hygiene Practices: None

Section IX – Additional Information

The information provided in this Material Safety Data Sheet represents data from the manufacturer and/or vendor and is accurate to the best of our knowledge. By providing this information, Delta Education LLC makes no guarantee or warranty, expressed or implied, concerning the safe use, storage, handling, precautions, and/or disposal of the products covered or the accuracy of the information contained in this fact sheet. It is the responsibility of the user to comply with local, state, and federal laws and regulations concerning the safe use, storage, handling, precautions, and/or disposal of products covered in this fact sheet.