SECTION 1 – IDENTIFICATION

Trade Name: Super Silva Solder **Product No.:** A900
Classification: Solder for Electronics/Electrical Applications
Supplier's Name: Applied Maintenance Specialties **Emergency Phone:** 1-800-721-2448
Address: P.O. Box 209, Buna, TX 77612

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

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

Component	CAS No.	OSHA PEL	ACGIH TLV 8hrTWA	Density (lbs./in^3) & (g/ml)	% (Opt.)
Tin (Sn)	7440-31-5	2 mg/m^3	2 mg/m^3	.2640 & 7.307	96.5
Silver (Ag)	7440-22-4	.01 mg/m^3 (Dust & Fume)	.01 mg/m^3 (Dust & Fume)	.3787 & 10.482	3.5
*Azelaic Acid	123-99-9	NE	NE	NA	0-4
Urea	57-13-6	NE	5 mg/m^3	NA	0-4
Ethylene Diamine dihydrochloride	333-18-6	NE	50 ppm	NA	0-4
Ethylene dihydrochloride	557-66-4	NE	NE	NA	0-4
Succinimide	123-56-8	NE	NE	NA	0-4

* Acid Flux Core is centered inside the wire is 3% by weight. NA = Not Applicable
NAIF = Not Applicable Information found NE = Net Established

SECTION 3 – HAZARD IDENTIFICATION

Primary routes of entry:

Inhalation: fumes
Ingestion: Solid metals – not edible; highly unlikely
Skin Absorption: N/A

Signs and symptoms of overexposure:

Flu-like symptoms (nausea, constipation, headache, dizziness) – self-limiting, usually disappear within 24 hours

SECTION 4 – FIRST AID MEASURES

Ingestion: Drink large quantities of water – induce vomiting. Call a physician at once; advise of chemical composition (Section 2).
Skin: Wash thoroughly with water to remove any residue. If a rash develops, call a physician.
Inhalation: Terminate exposure and remove to fresh air. Call physician; advise of chemical composition (Section 2).
Eyes: Flush with water for at least 15 minutes to remove irritant. Consult a physician.

SECTION 5 – FIRE FIGHTING MEASURES

Flash point and Methods used: N/A
Auto Ignition Temperature: N/A
Flammability Limits: (In air, % by volume) LEL: N/A and UEL: N/A
Extinguishing Method: CO_2 or cry 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.
*Do not plunge damp or wet solder bars/pieces into molten solder.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

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.

SECTION 7 – HANDLING AND STORAGE

Precautions to be taken in handling and storage: Dry storage: ambient temperature.
Other precautions/special handling: Wet or moist ingot(s) WILL present an explosion hazard when submerged in molten solder.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Respiratory Protection	Use NIOSH approved breathing apparatus to prevent exposure to dusts and fumes.
Eye Protection	Approved safety glasses or welding goggles, appropriate to your procedure, should be worn.
Ventilation	Local exhaust: Yes Mechanical: Yes Special: Conform to your regulatory statutes
Other	Standard protective equipment used in soldering (applicable) operations.

***** Protective gloves are recommended, especially for high temperature applications to prevent burns.

* Conform to all local, State and Federal regulations.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: Sn @ 4120ºF / 2270ºC – Ag @ 4010ºF / 2210ºC and Acid Flux: 385ºF / 196ºC
Melting Point: 420ºF / 221ºC Eutectic
Vapor Pressure (mm Hg): N/A
Vapor Density (AIR = 1) N/A
Density: .2680 lbs./in.^{3} and/or 7.4186 g/ml
Solubility in Water: 0 (solid)
Evaporation Rate (Butyl Acetate = 1): N/A
Appearance and Odor: Lustrous, silver metal; odorless / various shapes and sizes

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable
Conditions to avoid: Avoid strong oxidizing materials, e.g., chlorine trifluoride, hydrogen peroxide, sodium azide, ammonia and acetylene.

SECTION 11 – TOXICOLOGY INFORMATION

Tin (Sn): Elemental Tin is NOT generally considered to be toxic
Silver (Ag): Argyria, a blue-gray discoloration of the skin, mucous membranes, and eyes may result from inhalation of silver. Note: this discoloration may be permanent.

IT IS UNLIKELY THAT NORMAL EXPOSURE (USING APPROPRIATE PROTECTIVE EQUIPMENT) WOULD RESULT IN ILLNESS.

	Health	Flammability	Reactivity	Special
NFPA Rating	1	0	0	0
HMIS Rating	1	0	0	0

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = High

SECTION 12 – ECOLOGICAL INFORMATION

This product will not biodegrade. It will oxidize if left out in the elements, but will not affect the surrounding ecology.

SECTION 13 – DISPOSAL CONSIDERATION

Waste disposal method: Dispose of according to federal, state, local and OSHA regulations.

SECTION 14 – TRANSPORT INFORMATION

Department of transportation:

Proper Shipping name: Solder wire – not regulated
Hazard Class: NAIF
ID & Packing Group Number: NAIF
ERG Guide Number: NAIF

SECTION 15 – REGULATORY INFORMATION

SARA Title III Program: This product contains no toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right to Know Act (CPCRA) of 1986 and 40 CFR 372.

SECTION 16 – OTHER INFORMATION

The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the user. No suggestions for use are intended as, and nothing herein shall be construed as a recommendation to infringe any existing patents or violate any federal, state or local laws, rules, regulations or ordinances.