

IDENTITY SOLDER 7097		No. 001246	Revision A
Section I			
Manufacturer's Name Senju Metal Industry Co., Ltd.			
Address 23, Senju-Hasido-cho, Adachi-ku, Tokyo, JAPAN 120-8555		Telephone Number for Information 03 (3888) 5152 Data Prepared 09 Nov, 2000	

Section II - Hazardous Ingredients/Identity Information

Hazardous Components	CAS No.	OSHA PEL	ACGIH TLV	%
Tin	7440-31-5 *Current OSHA standard, and ACGIH(1980) Intended changes List for tin, tin oxide, and inorganic compounds (except SnH4), as Sn. STEL is for 4 mg/m ³	2mg/m ³ (8Hr-TWA)	2mg/m ³ (8Hr-TWA)	92 ~ 97
Silver	7440-22-4	0.01mg/m ³ (8Hr-TWA)	0.1mg/m ³ (8Hr-TWA)	3 ~ 5
Copper	7440-50-8	0.1mg/m ³ (8Hr-TWA)	1.0mg/m ³ (8Hr-TWA)	0.2 ~ 1.0

Section III - Physical/Chemical Characteristics

Boiling Point	NA	Specific Gravity (H ₂ O=1)	7.4
Vapor Pressure (mm Hg)	NA	Melting Point (°C)	217~222
Vapor Density (AIR=1)	NA	Evaporation Rate (Butyl Acetate=1)	NA

Solubility in Water

Insoluble

Appearance and Odor

Silver-gray metal, odorless.

Section IV - Fire and Explosion Hazard Data

Flash Point	---	Flammable Limits	LEL	UEL
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Extinguishing Media

Carbon dioxide and/or dry chemical

Special Fire Fighting Procedures

Use self-contained breathing apparatus and full protective clothing for fires in enclosed areas.

Unusual Fire and Explosion Hazards

NA

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid: Keep away from heat, sparks and open flames.
	Stable	X	

Incompatibility Strong oxidizing materials, acids, hydrogen peroxide.

Hazardous Decomposition or Byproducts NA

Hazardous Polymerization	May Occur		Conditions to Avoid	NA
	Will Not Occur	X		

Section VI - Health Hazard Data

Route of Entry : Inhalation Skin Ingestion

Health Hazards

When heated, vapors can cause irritation to eyes, nose and throat. May cause headache.

Carcinogenicity : Not listed NTP IARC Monographs OSHA Regulated

Signs and Symptoms of Exposure

Symptoms of the neurological effects may include irritability, headaches, insomnia, delirium, convulsion, muscular tremors, and palsy of the extremities.

Medical Conditions Generally Aggravated by Exposure

Emergency and First Aid Procedures

Inhalation : Excessive overexposure may result in an acute or chronic illness. If symptoms are present, the individual should be removed from exposure and a physician consulted.

Ingestion : Call a physician at once.

Skin : For hot metal burns, exposed area should be cooled with water and get medical attention. After handling solder, wash thoroughly with soap and water.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Avoid inhalation of solder fume or dust. Vacuuming is recommended.

Waste Disposal Method

Contact supplier or a licensed chemical waste disposal contractor for treatment, packaging, and disposal requirements.

Precautions to Be Taken in Handling and Storing

Avoid breathing smoke during soldering. Wash hands before eating or smoking after handling solder.

Other Precautions

Section VIII - Control Measures

Respiratory Protection

A NIOSH approved dust/fume respirator should be worn where applicable limits may be exceeded.

Ventilation	Local Exhaust	Remove smoke from breathing area	Special	Not required
	Mechanical		Other	

Protective Gloves

Use plastic or rubber gloves and aprons where necessary to avoid skin contact.

Eye Protection

Safety glasses or goggles should be worn in areas where splashing may occur.

Other Protective Clothing or Equipment

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV's.

Work/Hygienic Practices