IDENTITY CERASOLZER #224	No. 910021	Revision B

Section I

Manufacturer's Name Senju Metal Industry Co,. Ltd.	
Address 23, Senju-Hashido-cho, Adachi-ku, Tokyo, Japan 120-8555	**Telephone Number for Information** 03(3888)5152
	Data Prepared Mar., 12, 2002
	Signature of Prepare

Section II - Hazardous Ingredients/Identity Information

Hazardous Components	CAS No.	OSHA PEL	ACGIH TLV	%
Tin	7440-31-5	2 mg/m3	2 mg/m3	38
Lead	7439-92-1	0.05 mg/m3	0.05 mg/m3	56
Zinc	7440-66-6	NE	NE	2
Antimony	7440-36-0	0.5 mg/m3	0.5 mg/m3	3
Al, Ti, Si, Cu				1

Section III - Physical/Chemical Characteristics

Boiling Point	NA	**Specific Gravity (H2O = 1)**	9.7
Vapor Pressure (mm Hg)	NA	**Melting Point (℃)** ALLOYS	224
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 (Solvent used in this flux)	Flammable Limits	LEL	UEL
NA		----	----

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
When heated to high temperatures, lead emits highly toxic fumes.

Section V - Reactivity Data			IDENTITY Cerasolzer #224
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	lead oxide fume.		
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.

The chief effects of excessive lead intake are anemia, neurological disorders, and kidney damage.

Carcinogenicity: Not listed NTP IARC Monographs OHSA 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

Step to Be Taken in Case Material is Released or Spilled

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

Water 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 handing 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	Eye protection
Use plastic or rubber gloves and aprons where necessary to avoid skin contact.	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