# MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29CFR 1910.1200

Rev. 04/06/07

# **LEAD-FREE ALLOY**

# 100% WATERSAFE

CANFIELD TECHNOLOGIES INC 1 CROSSMAN ROAD SAYREVILLE, NJ 08872 Phone No. 732-316-2100 Infotrac Emergency No. 1-800-535-5053

# 1. PRODUCT INGREDIENTS

		Weight	Permissible		SARA Title III
Chemical Name	CAS No.	<u>%</u>	Concen.(mg/cu.m.)		Sect.313Chem
			OSHA	ACGIH	
TIN	7440-31-5	>90%	2.0	2.0	NO
COPPER	7440-50-8	<5%	.1	.1	NO
SILVER	7440-22-4	<2%	.1	.1	NO
ANTIMONY	7440-36-0	<2%	0.5	0.5	NO

#### 2. PHYSICAL DATA

Material is Appearance and Odor

SOLID SILVER-WHITE METAL, ODORLESS, VARIOUS SHAPES AND SIZES

Melting Point Boiling Point Specific Gravity Vapor Density

APPROX 430°F < 4000°F APPROX. 7.1 N/A

Solubility in Water Vapor Pressure Evaporation Rate PH INSOLUBLE N/A N/A N/A

### 3. FIRE AND EXPLOSION DATA

Flash Point Flammable Limits Auto Ignition Temp.

N/A N/A N/A

**Unusual Fire and Explosion Hazards** 

IN EXTREMELY HIGH TEMPERATURE FIRE OR IN CONTACT WITH CERTAIN ACIDS, MAY EMIT TOXIC FUMES. USE SELF-CONTAINED RESPIRATORY SYSTEM.

Fire Extinguishing Agents Recommended

USE CO2 OR DRY CHEMICAL ON SURROUNDING FIRE.

Fire Extinguishing Agents to Avoid

DO NOT USE WATER ON FIRE WHERE MOLTEN METAL IS PRESENT.

**Special Fire Fighting Precautions** 

USE NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS AND FULL BODY PROTECTIVE CLOTHING.

NFPA Codes: Health 1, Flammability 0, Reactivity 0, Other 0 HMIS Codes: Health 1, Flammability 0, Reactivity 0, Other 0

### 4. HEALTH HAZARD INFORMATION

**Primary Routes of Entry** 

INGESTION X INHALATION

**ABSORPTION** 

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, BODYACHE AND CHILLS. IT SHOULD BE RECOGNIZED THAT EXPOSURE OF THIS MAGNITUDE IN AN INDUSTRIAL ENVIRONMENT IS EXTREMELY UNLIKELY.

**Chronic Overexposure (symptoms and effects)** 

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.

#### 5. PRECAUTIONS/PROCEDURES

OVERHEATING OF ALLOY CAN PRODUCE METAL FUMES AND OXIDES. MACHINING OPERATIONS SUCH AS GRINDING, SAWING OR BUFFING CAN GENERATE AIRBORN PARTICULATES IN THE WORK AREA. EXPOSURE LEVELS INDICATED IN SECTION 1 ARE RELAVENT 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 AIRBORN 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 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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