

# MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29CFR 1910.1200

Rev. 01/03/06

## TIN SILVER B-CORE

### SRA

56 LEONARD ST., SUITE #2  
FOXBORO, MA 02035

Phone: 508-543-4111  
Infotrac Emergency No. 1-800-535-5053

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### 1. PRODUCT INGREDIENTS

<u>Chemical Name</u>	<u>Cas No.</u>	<u>Weight %</u>	<u>Permissible Air Concen.(mg/cu.m.)</u>		<u>SARA Title III Sect.313Chem.</u>
			OSHA	ACGIH	
TIN	7440-31-5	94-99	2.0	2.0	NO
SILVER	7440-22-4	1-6	0.01	0.01	YES
UREA	57-13-6	1-3%	15	15	NO
AMMONIUM CHL	12125-2-9	1-3%	10	10	NO

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### 2. PHYSICAL DATA

Material is SOLID	Appearance and Odor SILVER-WHITE METAL WIRE, ODORLESS		
Melting Point METAL-APPROX. 221°C	Boiling Point 2250°C	Specific Gravity 7.1	Vapor Density N/A
Solubility in Water INSOLUBLE	Vapor Pressure N/A	Evaporation Rate N/A	pH N/A

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### 3. FIRE AND EXPLOSION DATA

Flash Point METAL N/A	Flammable Limits N/A	Auto Ignition Temp. N/A
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Unusual Fire and Explosion Hazards  
WHEN HEATED OR IN CONTACT WITH ACIDS, CAN EMIT TOXIC FUMES

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  
N/A

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### 4. HEALTH HAZARD INFORMATION

Primary Routes of Entry INGESTION	X INHALATION	ABSORPTION
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**Carcinogenicity**

**THIS PRODUCT HAS NOT BEEN LISTED AS A SUSPECT CARCINOGEN BY NPT, IARC OR OSHA.**

**Acute Overexposure(symptoms and effects)**

**INHALATION MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT.**

**EYE CONTACT BY FUMES MAY CAUSE IRRITATION.**

**SKIN CONTACT MAY CAUSE IRRITATION.**

**Chronic Overexposure(symptoms and effects)**

**ROSIN IS A POTENTIAL ALLERGENIC-CAN CAUSE A RASH OR OTHER ALLERGIC REACTION TO A ROSIN SENSITIVE PERSON.**

**CHRONIC OVEREXPOSURE TO THE FUMES FROM THE FLUX MAY CAUSE IRRITATION TO THE PULMONARY SYSTEM AND LUNG DISEASE.**

**Medical Conditions Possibly Aggravated By Exposure**

**SEE ABOVE**

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**5. PRECAUTIONS/PROCEDURES**

**OVERHEATING OF ALLOY CAN PRODUCE METAL FUMES AND OXIDES. MACHINING OPERATIONS SUCH AS GRINDING, SAWING OR BUFFING CAN GENERATE AIRBORNE PARTICULATES IN THE WORK AREA. EXPOSURE LEVELS INDICATED IN SECTION 1 ARE RELEVANT TO THESE AND OTHER OPERATIONS.**

**Normal Handling:**

**USE OF APPROVED RESPIRATORS IS REQUIRED FOR APPLICATIONS WHERE ADEQUATE VENTILATION CANNOT BE PROVIDED. ACTIVITIES WHICH GENERATE DUST OR FUME SHOULD BE AVOIDED. WHEN MELTED, THE TEMPERATURE SHOULD BE KEPT AS LOW AS POSSIBLE.**

**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 AIRBORNE EXPOSURES MAY EXCEED PERMISSIBLE AIR CONCENTRATIONS.**

**Storage:**

**GENERAL STORAGE PROCEDURES ACCEPTABLE.**

**Special Precautions, Procedures and Label Instruction:**

**SPECIAL ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE OSHA RESPIRATOR STANDARD (1910.134) SHOULD AIRBORNE EXPOSURES EXCEED THE OSHA ACTION LEVEL OR PEL.**

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## 6. PERSONAL PROTECTIVE EQUIPMENT

### Respiratory Protection:

WHERE AIRBORNE EXPOSURES MAY EXCEED OSHA/ACGIH PERMISSIBLE AIR CONCENTRATIONS, THE MINIMUM RESPIRATORY PROTECTION RECOMMENDED IS A NEGATIVE PRESSURE AIR PURIFYING RESPIRATOR WITH CARTRIDGES THAT ARE NIOSH/MSHA APPROVED AGAINST DUST, FUMES AND MISTS HAVING A TWA NOT LESS THAN 0/05 MG/CU M.

### Eyes and Faces

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 IF SKIN CONTACT IS APPRECIABLE.

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## 7. REACTIVITY DATA

Stability: STABLE

Conditions to Avoid: OPEN FLAMES, STRONG ACIDS, SULFUR, CHLORINE, SODIUM AND POTASSIUM PEROXIDE.

Incompatibility: STRONG OXIDIZERS MAY CAUSE VIOLENT REACTION

Hazardous Decomposition Products: REACTION WITH STRONG ACIDS CAN PRODUCE TOXIC ORGANIC OR INORGANIC TIN COMPOUNDS.

Hazardous Polymerization will not occur.

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## 8. ENVIRONMENTAL

Regulated by DOT? NO

Waste Disposal Method(DISPOSER MUST COMPLY WITH FEDERAL, STATE AND LOCAL DISPOSAL OR DISCHARGE LAWS)

IF HAZARDOUS UNDER 40 CFR261, SUBPARTS B AND C, MATERIAL MUST BE TREATED OR DISPOSED IN A FACILITY MEETING THE REQUIREMENTS OF 40 CFR254 OR 265. IF NON-HAZARDOUS, MATERIAL SHOULD BE DISPOSED IN A FACILITY MEETING THE REQUIREMENTS OF 40 CFR257.

RCRA Status of Unused Material:

IF DISCARDED IN UNALTERED FORM, MATERIAL SHOULD BE TESTED TO DETERMINE IF IT MUST BE CLASSIFIED AS A HAZARDOUS WASTE FOR DISPOSAL PURPOSES. UNDER SPECIFIC CIRCUMSTANCES, APPLICATION CAN BE MADE TO THE EPA ADMINISTRATOR TO HAVE A PARTICULAR WASTE DESIGNATED NON-HAZARDOUS.

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## 9. ADDITIONAL INFORMATION

Precautions to be taken in handling and storing: STORE IN A COOL, DRY PLACE AVOIDING CONTACT WITH EXCESSIVE HEAT AND ACIDS.

Other Precautions: NONE

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