



Material Safety Data Sheet
(TIN, ANODES, IGOT, BAR, WIRE ASTM B339-95)

SECTION 1 – IDENTIFICATION

Material/Product: Tin
Commercial Name:

Distribution: Miller and Company LLC
9700 West Higgins Road
Suite 1000
Rosemont, IL 60018
Telephone: (847) 696-2400

Manufacturer: Grant Manufacturing & Alloying, Inc. Person to Contact: David Charest
200-C Furnace Street Effective Date: 06/02/05
Birdsboro, PA 19508 Telephone: (610) 404-1380

SECTION 2 – CONSTITUENTS

CHEMICAL	CAS #	% WT	CARCINO GEN	TLV
Tin	7440-31-5	98.5% minimum	NO	2mg/cu m ACGIH

SECTION 3 – PHYSICAL DATA

Melting Point: 360-620 degrees
Boiling Point: N/AP
Vapor Pressure: Not Volatile
Vapor Density: Not Volatile
Solubility in Water: nil
Appearance/Color: Silver to gray
Specific Gravity, 68-77 F: 7-11 (approx.), depending on alloy
Odor: None
% Volatile: nil
pH: N/AP
Evaporation Rate: N/A

SECTION 4 – FIRE AND EXPLOSION DATA

Flash Point: Not flammable
Flammable Limits: N/AP
Extinguishing: N/AP
Methods Fire Fighting Equipment: If metal is present where there is fire, wear self-contained respirators in case of lead fumes.

SECTION 5 – REACTIVITY DATA

Stability:	Stable
Conditions to avoid:	N/AP
Hazardous	
Polymerization:	Will not occur
Incompatibility:	Strong acids, reducing agents, halogens and oxidizers.

SECTION 6 – SPILL, LEAK AND DISPOSAL PROCEDURES

Actions to take for spills:	Allow to solidify, collect and place in sealed drum
Disposal Method:	Return to supplier.

SECTION 7 – HEALTH HAZARD INFORMATION

Eye:	dust or fumes will be an irritant
Skin Contact:	not a route of entry to the body
Skin Absorption:	not a route of entry to the body
Ingestion:	Ingestion of lead dust or fumes must be avoided. Lead is toxic and affects kidneys and nervous system. Symptoms will include anemia, insomnia, constipation and stomach pains. Tin is not regarded as toxic, but expect fever, nausea, diarrhea and stomach cramps.

SECTION 8 – FIRST AID PROCEDURES

Eyes:	Flush thoroughly with water for fifteen minutes. Consult with physician
Skin:	Wash thoroughly with water.
Ingestion:	Induce vomiting if person ingests. Immediately contact Physician.
Inhalation:	Remove to fresh air.
Physician:	Check for effects of anemia, insomnia, constipation, or stomach pains.

SECTION 9 – SPECIAL HANDLING INFORMATION

Ventilation:	Required to maintain ambient pressure.
Respiratory Protection:	Fume Mask required.
Eye Protection:	Wear protective goggles.
Skin Protection:	Use protective gloves.
Other:	N/A

SECTION 10 – SPECIAL PRECAUTIONS

Storage:

Store in clean and dry environment. Keep away from chemicals that might migrate in to the metal.

SECTION 11 – HAZARD RATING

Based on NFPA and NPCA Systems

Health – 1

Flammability – 0

Reactivity – 0

Special Hazards – W

END: