

The Platt Bros. & Co. PBC - 4MZ
 P.O. Box 1030 (2670 S. Main St.)
 Waterbury, CT 06721

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 DATE: March 2, 1999
 (203) 753-4194

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Zinc base alloys in rod, bar, strip, coil, tube and scrap.

CHEMICAL FAMILY: Zinc Alloy

USE OF PRODUCT: Article Fabrication

Product includes the following Zinc Alloys: 307, 309

SECTION I -- CHEMICAL COMPOSITION

Alloy may contain any or all of the chemical constituents listed below:

	<u>CAS. NO</u>	<u>RANGE (%)</u>	<u>TLV</u>	<u>(mg/m³)</u>
Zinc	7440-66-6	99.880 - 99.974	05.00	As Fume
Cadmium	7440-43-9	00.003 - 00.020	00.05	As Dust or Fume
Copper	7440-50-8	00.005 - 00.020	00.02	As Fume
Iron	7439-89-6	00.010 - 00.020	05.00	As Fume
Lead	7439-92-1	00.030 - 00.020	00.05	As Dust or Fume
Tin	7440-31-5	00.001 - 00.020	02.00	As Dust or Oxide
Aluminum	7429-90-5	00.003 - 00.020	10.00	As Dust or Oxide

SECTION II -- PHYSICAL DATA

Melting Point: 788°F

Boiling Point: 1665°F

Solubility in Water: Not soluble

Appearance & Odor: This product is bluish white solid at room temperature, and exhibits no odor.

Specific Gravity: (H₂O=1) 7.14

Vapor Pressure: N. A.

Volatile % by Volume: N. A.

SECTION III -- STORAGE, FIRE & REACTIVITY

Flash Point: N.A.

Auto Ignition: N.A.

Flammability Limits In Air: N.A.

There is no unusual fire and explosion hazard with this alloy. Never use water as an extinguishing agent around molten metal. Use Class D extinguisher, or dry sand. Use NIOSH/MSHA self-contained breathing apparatus for protection against degradation products and fire fighting techniques or agents applicable to surrounding materials.

- Small chips, fine turnings and dust may ignite readily. Do not use halogenated extinguishing agents on small chips or fines. Dust clouds may be explosive.
- This alloy is stable, non-hazardous solid at room temperature.
- Material may react with strong acids or alkaline materials.
- Material does not present a significant health hazard under normal handling and storage.

SECTION IV -- HEALTH HAZARD DATA

Under normal handling conditions the solid alloy presents no significant health hazards. Processing of the alloy by dust or fume producing operations (grinding, buffing, sawing, forging, cutting, welding, etc.) may result in the potential for exposure to airborne metal particulate or fume. The exposure levels in SECTION I are relevant to fumes or dust.

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EFFECTS OF OVEREXPOSURE

Acute exposure to Zinc dust or fume may cause irritation to the eyes, nose, or throat; leave a metallic taste in the mouth; result in metal fume fever; or produce flu-like symptoms.

Cadmium: Loss of smell, ulceration of the nose, shortness of breath, (emphysema), kidney damage, and mild anemia, also reported to cause an increased incidence of cancer of the prostate in men.

Copper: No chronic debilitating symptoms indicated.

Iron: Siderosis

Lead: Anemia, urinary dysfunction, metallic taste in mouth, weakness, constipation, nausea, nervous disorder.

Aluminum: May initiate fibrotic changes to lung tissue.

Tin: A benign pneumoconiosis may result. Pulmonary function is not affected.

Zinc: Chromosomal anomalies in leukocytes reported. Arthritic, lameness and inflammation of the gastrointestinal tract reported from animal studies.

SECTION V -- FIRST AID

Ingestion: Ingestion of significant amounts of Zinc alloy are unlikely. Seek medical help if large quantities of product are ingested.

Inhalation: Remove from exposure to dust or fume if present. Seek medical help if required.

Skin contact: Flush thoroughly with water.

Eye Contact: Flush with water for at least 15 minutes. Seek medical help if required.

SECTION VI -- SPILL PROCEDURES

Product is a non-hazardous solid. No special precautions are required for spills of bulk material. Scrap metal can be reclaimed for reuse. Follow Federal, State and local regulations regarding disposal.

SECTION VII -- SPECIAL PROTECTION INFORMATION

Typically no special protection is required during use of product beyond that required for the process operation being employed. Where dust or fume levels are greater than those specified in SECTION I, NIOSH approved respiratory protection should be used. Use local exhaust ventilation for dust/fume. Use approved goggles for eye protection.

SECTION VIII -- SPECIAL PRECAUTIONS AND COMMENTS

- Wet material should never be charged into a molten bath.
- Eye protection should be used when cutting, grinding, machining or buffing product.
- Eye protection should also be used with any other process that generates dust, fume or chips. Dark glasses should be worn when metallizing.
- Wash hands thoroughly after use, especially before eating.

SECTION IX -- ENVIRONMENTAL/SAFETY REGULATIONS

SECTION 313 (Title III Superfund Amendment and Reauthorization Act of 1986 and 40CFR Part 372).

- This product contains the following chemical(s) subject to the reporting requirements of SECTION 313. Zinc, CAS No. 7440-66-6, no more than 100% by weight.
- The information in this Material Safety Data Sheet was obtained from sources which we believe are reliable. However, the information is provided without any representation or warranty, expressed or implied regarding the accuracy or correctness.
- The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.