

– Material Safety Data Sheet –

EPM LEAD ALLOY PARTS

SECTION I

Manufacturer's Name: East Penn Manufacturing Co., Inc.
 Deka Road, Lyon Station, PA 19536
Telephone Number for Information: (610) 682-6361
Emergency Telephone Number: CHEMTREC: 1-800-424-9300,
 In Washington D.C. or outside continental U.S., call 1-202-483-7616

Date: May 12, 2005

SECTION II

HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components Specific Chemical Identity (Common Name (s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	Percent
Lead, #7439-91-1	0.05 mg/m ³	0.15 mg/m ³	(SARA III)	>94.0
Antimony, #7440-36-0	0.50 mg/m ³	0.50 mg/m ³	(SARA III)	2.8-6.0
Arsenic, #7440-38-2	0.01 mg/m ³	0.02 mg/m ³	----	<0.2
Tin, #7440-31-5	2.00 mg/m ³	2.00 mg/m ³	----	<0.4

Additional elements such as copper, silver, nickel, etc. may be present, however their concentration is less than 0.05%.

SECTION III

PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Bluish-gray soft metal
Boiling Point: Lead 1740°C
Evaporation Rate (Butyl Acetate=1): N/A
Melting Point: 328°C

Solubility in Water: Insoluble
Specific Gravity (H₂O=1): 11.3 (at 20°C)
Vapor Density: N/A
Vapor Pressure: 1 mmHg at 973°C

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A
Extinguishing Media: Dry chemical and/or carbone oxide. Use water fog or alcohol foam for larger fires.
LEL: 4% **UEL:** 74%
Special Fire Fighting Procedures: Highly toxic lead fumes may evolve when the metal is heated. Wear protective clothing and a self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: Lead dust is a moderate fire and explosion hazard when exposed to heat or flame. Lead pigs and parts may contain cavities of moisture when stored in a wet environment; entrapped moisture may expand explosively when melted or heated.

Flammable Limits: N/A

SECTION V

REACTIVITY DATA (Battery Case)

Stability: Stable **Condition to Avoid:** Lead is stable under normal conditions.

Incompatibility (Materials to Avoid): Avoid oxidizing agents and active metals. Contact with disodium acetylid chlorine trifluoride, or fused ammonium nitrate poses an explosion risk. Contact with sodium azide can form a lead azide which is a detonating compound.

Hazardous Decomposition of By-Products: Thermal oxidization products are highly toxic lead fumes.

Hazardous Polymerization: will not occur **Conditions to Avoid:** N/A

SECTION VI HEALTH HAZARD DATA

Primary Route(s) of Entry: N/A

Health Hazards (Acute and Chronic): The handling of lead alloy parts presents a few health hazards itself. However, prolonged exposure to lead fumes or dust can result in lead poisoning. Lead accumulates in the bone and body organs and is eliminated from the body slowly.

Carcinogenicity: N/A

OSHA Regulated?: 29CFR 1910.1025

California Prop 65: Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals know to the State of California to cause cancer and birth defects or other reproductive harm. **WASH HANDS AFTER HANDLING.**

Signs and Symptoms of Exposure:

Short Term: Headache, nausea, vomiting, abdominal spasms, fatigue, weight loss, anemia, pain in legs, arms, and joints.

Long Term: CNS damage, kidney disfunction, and potential reproductive hazard. Symptoms of lead exposure may be confined by the presence of elevated levels of lead in the blood.

Medical Conditions Generally Aggravated by Exposure: Pregnant women should be protected from excessive exposure.

Emergency and First Aid Procedures:

Inhalation: Remove victim to fresh air area. If breathing stops, give artificial respiration. Seed medical attention.

Eyes, Skin: Flush contacted area with water for about 15 minutes. If irritation persists, seed medical attention.

Ingestion: Do not induce vomiting. Seek medical attention.

SECTION VII PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: No special precautions are necessary for spills of cast lead alloy parts.

Waste Disposal Method: Scrap metal can be reclaimed for re-use. Follow federal, state, and local regulations for disposal.

Precautions to be Taken in Handling and Storing: Store in dry area.

Other Precautions: Always use good hygiene practices when handling lead and it's compounds. Recommend practice includes showering at the end of each work shift, lead contaminated clothing should be properly laundered, and wash thoroughly after handling, and before eating, drinking, and smoking.

SECTION VIII CONTROL MEASURES

Ventilation: N/A

Local Exhaust: Most effective point source control method

Mechanical (General): Minimal requirement

Special: N/A

Other: N/A

Respiratory: When exposure concentrations exceed the PEL, appropriate respiratory protection is required.

Protective Gloves: Protective clothing, gloves, and respirators are recommended where lead fumes or dust is generated.

Eye Protection: Face shield is recommended when handling molten material.

Other Protective Clothing or Equipment: N/A

Work Hygienic Practices: Good personal hygiene and work practices are essential. Avoid breathing lead dust or fumes.