



Expect Service

Radiation Products Design Inc

MATERIAL SAFETY DATA SHEET

RPD INFORMATION

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RAW MATERIAL INFORMATION

LEAD



MATERIAL SAFETY DATA SHEET – LEAD
(Also Available in Spanish, See Section 16)

SECTION 1 - PRODUCT IDENTIFICATION and COMPANY INFORMATION

Product Name: Lead

Synonyms: Lead, sheet; Lead, bricks; Lead, flashings; Lead, ingot; Lead, pipe; Lead, wool; Lead, solder; Lead alloy, and other miscellaneous Lead products

CAS No: 7439-92-1

Molecular Weight: 207.19

Chemical Formula: Pb

Contact Information:

Mayco Industries, Inc.
18 West Oxmoor Road
Birmingham, AL 35209

Phone: 205-942-4242

Sales: 800-749-6061

Web site: www.maycoindustries.com

SECTION 2 – COMPOSITION and INFORMATION on INGREDIENTS

<u>Material</u>	<u>% by Wt.</u>	<u>CAS #</u>	<u>OSHA EXPOSURE LIMIT</u>
Lead	91 – 99.99	7439-92-1	0.05 mg/cubic meter
Antimony	0.5 – 9.0	7440-36-0	0.50 mg/cubic meter

SECTION 3 – HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation: Lead dust and fume can be absorbed through the respiratory system. Local irritation of bronchia and lungs can occur. In cases of acute exposure, symptoms such as metallic taste, chest and abdominal pain, and increased blood lead levels may follow.

Ingestion: POISON. The symptoms of lead poisoning include abdominal pain and spasms, nausea, vomiting and headache. Acute poisoning can lead to muscle weakness, metallic taste, loss of appetite, insomnia, dizziness, high levels of lead in blood and urine, coma and death in extreme cases.

Skin Contact: Lead may be absorbed through the skin after prolonged exposure. Contact over short periods may cause local irritation.

Eye Contact: May cause eye irritation.

Signs & Symptoms of Overexposure

Acute (short term) exposure: Lead is a potent, systemic poison; taken in large enough doses, lead can kill in a matter of days. Acute encephalopathy may arise which develops quickly to seizures, coma and death from cardio-respiratory arrest.

Chronic (long term) exposure: Chronic overexposure to lead may result in severe damage to blood forming, nervous, urinary and reproductive systems. Some common symptoms of chronic overexposure include loss of appetite, metallic taste in mouth, anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, nervous irritability, muscle & joint pain, fine tremors, numbness, dizziness, hyperactivity, colic.

SECTION 4 – FIRST AID MEASURES

Emergency & First Aid Procedures

Inhalation: Remove from exposure. Get medical attention if individual experiences any of the acute effects listed above.

Skin: Wash thoroughly with soap and water.

Eyes: Flush with cool running water for at least 15 minutes. Get medical attention if irritation develops.

Ingestion: Get medical attention.

Potential to Cause Cancer

Lead has been proven to cause cancer in animals. Certain lead compounds are suspect human carcinogens.

SECTION 5 - FIRE and EXPLOSION DATA

Flash Point: Not applicable

Extinguishing Media: Dry chemical, foam or CO₂

Special Fire Fighting Procedures: Use positive pressure, self-contained breathing apparatus.

Unusual Fire and Explosion Hazard: None

Lead is not considered to be a fire hazard. Powder/dust is flammable when heated or exposed to flame.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Protective Measures To Be Taken If Material Is Released Or Spilled: Mechanically collect material and place in drums. Use of a vacuum system with a high-efficiency filter is preferable. Process collected material through in-plant reclamation system or send to a lead smelter for reclamation following applicable federal, state and local regulations.

Use protective clothing, gloves and respiratory protection when cleaning up spills.

SECTION 7 – HANDLING and STORAGE

Precautions: Store in a protected area. Keep away from heat and sources of ignition. Do not ingest. Do not breathe dust or fume. Wear suitable protective clothing. Keep away from incompatibles such as oxidizing agents.

Other Handling & Storage Precautions

Occupational exposure to elemental lead, inorganic lead compounds and lead soaps (except in the construction industry and agricultural operations) is regulated by the Occupational Safety and Health Administration, Title 29 CFR 1910.1025, "Lead". The aforementioned OSHA regulation should be consulted to assure employees working with lead are properly protected. Exposure to lead in the construction industry is regulated by the Occupational Safety and Health Administration, Title 29 CFR, 1926.62.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Measures

Engineering Controls: Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust or fume, use ventilation to control airborne contaminants.

Work Practices: Avoid generating dust. Do not throw scrap to avoid generation of dust. Store scrap in appropriate containers and keep covered. Do not dry sweep or use compressed air to remove accumulations of lead dust. Vacuuming, using a high-efficiency filtration system is the preferred method for clean-up.

Personal Protection

If the OSHA exposure limit for lead is exceeded and engineering controls are not feasible, a half-face high efficiency respirator may be worn for up to ten times the exposure limit. Other recommended personal protective equipment (PPE) includes protective clothing, including boots and gloves to prevent prolonged skin contact, and safety glasses or goggles.

Other control Measures

Eating, drinking, smoking, and the application of cosmetics should not be permitted in areas where lead products are handled, processed, or stored.

SECTION 9 – PHYSICAL and CHEMICAL PROPERTIES

Material, at normal temperature, is: Solid

Boiling Point, at 760 mm Hg: 1740 C

Specific Gravity: 11.3 (Water = 1)

Vapor Density: Not Applicable

% Volatile by Weight: Not Applicable

Appearance & Odor: Solid, gray with bluish or silvery cast depending on alloy. No odor

Melting Point: 327° C (620° F)

Vapor Pressure: 1 mm Hg @ 970

Solubility in Water: Slightly soluble in water in the presence of nitrates, ammonium and carbon dioxide

Evaporation Rate: Not applicable

SECTION 10 – STABILITY and REACTIVITY

Stability: Stable

Incompatibility (materials to avoid): Reactive with strong Oxidizers

Hazardous Polymerization: Will not occur

Conditions to Avoid: Avoid contact with incompatible materials

SECTION 11– TOXICOLOGICAL INFORMATION

Investigated as a tumorigen, mutagen and reproductive effector. Lead is a human reproductive hazard.

Lead is a probable human carcinogen, proven for animals.

SECTION 12– ECOLOGICAL INFORMATION

Precautions should be taken to prevent the release of lead into the environment. Lead may bioaccumulate to some extent

SECTION 13– DISPOSAL CONSIDERATIONS

Lead scrap can be recycled. Waste materials must be disposed in accordance with federal, state and local environmental requirements.

SECTION 14– TRANSPORT INFORMATION

Lead metal is not a DOT regulated material.

SECTION 15- OTHER REGULATORY INFORMATION

California Proposition 65: Lead in this product is known to the State of California to cause cancer, birth defects, reproductive harm, and other serious injury and would require a warning under the statute.

HMIS (U.S.A.)

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (.U.S.A)

Health Hazard: 1

Flammability: 0

Reactivity: 0

Specific hazard:

SECTION 16- OTHER INFORMATION

Date MSDS Updated: October 10, 2009

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