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serving the nation's lead needs since 1952 with a full line of radiation shielding products

## FULL LINE OF RADIATION SHIELDING PRODUCTS

### MATERIAL SAFETY DATA SHEET – SOFT LEAD

#### GENERAL INFORMATION

Trade Name (Common Name or Synonym): Soft lead, corroding grade lead, pure lead

Manufacturer's Contact:

Radiation Protection Products, Inc.  
P.O. Box 862  
Wayzata, MN 55391

Tel. 1-888-RINGRPP

#### INGREDIENTS

Material or Component	C.A.B. #	Weight %	Permissible Air Limits
Lead	7439-92-1	99.9+%	0.05 mg/meter (OSHA)

#### PHYSICAL DATA

**Appearance and Odor:** Silver-gray metal, odorless. Various shapes and sizes.

**Boiling Point:** Greater than 2700°F

**Specific Gravity (H<sub>2</sub>O = 1):** 11.34

**Solubility in Water:** Insoluble

**Evaporation Rate:** Not Applicable

**Melting Point:** 621°F

**Vapor Density:** Not Applicable

**Vapor Pressure:** Not Applicable

**% Volatiles by Volume:** Not Applicable

#### HEALTH HAZARD INFORMATION

**Routes of Exposure:**

**Inhalation:** When scattered in the air as a dust, fume or mist, it may be inhaled (breathed) and absorbed through the lungs and upper respiratory tract irritation and it can result in both acute and chronic overexposure.

**Ingestion:** When it gets into the mouth and is swallowed, it may be absorbed through the digestive system and can result in both acute and chronic overexposure.

**Skin:** Dust, fume or mist, are not readily absorbed through the skin; however, they may cause mechanical irritation to the skin.

**Eyes:** Dust, fume or mist may cause mechanical irritation.

**Acute Overexposure:** If left untreated - weakness, vomiting, loss of appetite, uncoordinated body movements, convulsions, stupor, bloody stools, and possible coma.

**Chronic Overexposure:** If left untreated – weakness, insomnia, hypertension, slight irritation to skin and eyes, metallic taste in mouth, anemia, constipation, headache, muscle and joint pains, neuromuscular dysfunction, possible paralysis and encephalopathy.

Lead and its inorganic compounds are neurotoxins that may produce peripheral neuropathy. For an overview of the effects of lead exposure, see OSHA 29CFR1910.1025, Appendix A.

#### FIRST AID

**Inhalation:** Remove from exposure. Get medical attention if experiencing affects of overexposure.

**Ingestion:** Get immediate medical attention.

**Eyes:** Flush with large quantities of water. Get immediate medical attention.

**Skin:** Wash thoroughly with soap and water.

## FIRE AND EXPLOSION DATA

**Flash Point**  
Not Applicable

**Auto Ignition Temperature**  
Not Applicable

**Flammable Limits in Air**  
Not Applicable

**Fire Extinguishing Media**

Dry chemical or carbon dioxide should be used on surrounding fire.  
DO NOT use water on fires where molten metal is present.

**Special Fire Fighting Precautions**

Use approved full-face-piece, self-contained breathing apparatus and full protective clothing if involved in a fire.

**Unusual Fire and Explosion Hazard**

Molten metals produce fume, dust or mist that may be toxic.

## REACTIVITY DATA

**Stability**  
Stable

**Conditions to Avoid**  
Not Applicable

**Hazardous Polymerization**  
Not Applicable

## PERSONAL PROTECTION PRECAUTIONS

**Ventilation:** Local exhaust ventilation shall be provided in areas where exposures are above the permissible limits or threshold limit values specified by OSHA or other local, state, and federal regulations.

**Respiratory Protection:** Use of approved (OSHA 29CFR1910.1025 (f)) respirators is required for applications where adequate ventilation cannot be provided.

**Eyes and Face:** Face shields or vented goggles should be used around molten metal. Safety glasses should be used for operations generating flying pieces.

**Gloves:** Gloves should be worn when handling the product.

**Other Clothing and Equipment:** Full protective clothing is required if the permissible exposure limit is exceeded. Hard hat, safety shoes, and other safety equipment should be worn as appropriate for the environment.

## SPECIAL PRECAUTIONS/PROCEDURES

**Spill or Leak:** Dust or particulate should be vacuumed or wet swept where vacuuming is infeasible. Place material in dry, closed containers for disposal or recycling. Do not use compressed air or dry sweeping for cleaning. Use approved respiratory protection if dust/fume exposure possibility exists.

**Waste Disposal Method:** Material should be recycled if at all possible. Collection, transportation, and storage should be in accordance with federal, state and local laws.

**Storage:** Store in a dry area where accidental contact with hydrogen peroxide is not possible.

**Other Special Precautions/Procedures:** Wash hands, face, neck and arms thoroughly before eating or smoking. Eating and smoking should be confined to non-contaminated areas. Work clothes and equipment should remain in designated contaminated areas, and should never be taken home or laundered with personal clothing. Do not use compressed air for blowing dust off of clothes.

Before using the product, consult the OSHA Federal Standard for Occupational Exposure to Lead 29CFR1910.1025.

## ADDITIONAL INFORMATION

**Biological Limit for Lead:** 50 micrograms lead/100 grams whole blood.

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