

# FULL LINE OF RADIATION SHIELDING PRODUCTS

Radiation Protection Products (RPP) manufactures and distributes a full line of radiation shielding products. They include Lead Lined Doors (solid core wood, lead lined, and steel strapped), Lead Lined Drywall (otherwise known as Lead Lined Sheetrock or Lead Lined Gypsum Wallboard) and Lead Lined Plywood, Leaded X-ray Glass, Lead Lined Frames for borrowed lites and doors, pass boxes and many other lead products.

Radiation Protection Products uses only the finest quality material and exercises the best quality control possible.

We offer a top quality line of lead shielding products at a competitive price with delivery to satisfy your needs. For additional information concerning RPP's products or services, please contact us toll free at:

**888-746-4777 PHONE**

**866-554-8445 FAX**

## ALL SHIELDING PRODUCTS PROVIDED MEET THE FOLLOWING SPECIFICATIONS:

### Sheet Lead

Sheet Lead shall meet or exceed the Federal Specification QQL-201 F Grade C and ASTM B749-03 Standard Specification for Lead and Lead Alloy Strip, Sheet and Plate Products, see NCRP reports #33, #35, #49 and #147.

### Gypsum Board

Gypsum Board shall meet or exceed ASTM C36 A82.27, USDA SSL 30D Type III Grade X.

### Leaded Glass

Leaded Glass shall meet or exceed Federal Specification DD-G-451.

Radiation Protection Products manufactures all lead shielding products in accordance with Lead Industries Hand Book and all NCRP Applicable Reports (#33, #35, #39, #40, #49 and #147) and NBS, HB. #114.

### Cassette Transfer Cabinets

Cassette Transfer Cabinets shall meet or exceed MIL-C-3673 (DM).

### Wood and Plastic Laminate Doors

All Wood Doors shall meet or exceed the ANSI/NWMA Industry Standard I.S.I.-80, I.S.I.4-80, NCRP Report #49.

## TERMS AND CONDITIONS OF SALES

### Prices in U.S. Dollars

Prices are in U.S. dollars, F.O.B. factory, Chapel Hill, Tennessee, unless otherwise specified. Prices, specifications, and terms of sales are subject to change without notice. All orders are subject to review prior to acceptance.

### Terms

Net 30 days on established accounts with approved credit. Visa/MasterCard.

### Credit

New accounts, pending credit approval, may be immediately expedited by enclosing a check, wire transfer or credit card. To facilitate opening of accounts, please forward your bank and four (4) trade references. Tax-exempt or Resale Certificate required if applicable.

### Minimum

Minimum invoice of \$500.00. Orders under \$500.00 may require payment by Visa or MasterCard.

### Ordering/Purchasing

Your purchase order or contract is requested on all orders. All orders should be confirmed and clearly marked "Confirmation—Do Not Duplicate."

### Shipment

Unless detailed shipping instructions are specified on all orders, we reserve the right to choose the method of transportation and to make partial shipments, if necessary.

### Packaging/Set Up Charge

Special packaging quoted as extra. Set up charges may be applicable with certain fabrications.

### Returns

Return merchandise will be accepted only with prior written authorization. Freight charges must be prepaid.



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# PURE LEAD PRODUCTS

## SHEET LEAD



Radiation Protection Products uses only the purest lead available for our Sheet Lead and Lead Bricks. Absolutely no refining takes place at our facility, making us one of the cleanest, most environmentally friendly radiation shielding providers in the industry, providing you with the highest quality sheet lead available.



If you have any questions about the Sheet Lead we can provide, please contact Radiation Protection Products.

### NOMINAL SHEET LEAD SIZES AND WEIGHTS\*

Actual Thickness	Pounds Per Sq. Ft.	App. Thickness in Inches	
		Decimal	Fraction
	1	.0156	1/64 - .5mm
	1 1/2	.0234	3/128
	2	.0312	1/32
	2 1/2	.0391	5/128 - 1.0 mm
	3	.0468	3/64
	3 1/2	.0547	7/128
	4	.0625	1/16 - 1.58mm
	5	.0781	5/64 - 2.1mm
	6	.0937	3/32 - 2.5mm
	7 1/2	.1250	1/8
	10	.1563	5/32
	12	.1875	3/16
	14	.2188	7/32
	15	.2500	1/4
	20	.3333	1/3
	24	.4000	2/5
	30	.5000	1/2
	40	.6667	2/3
	60	1.000	1

*\*The weights given apply to common lead only. Other types of lead, such as antimonial or hard lead, weigh slightly less for a given thickness.*



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## 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 encapalopathy.

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.

**RPP, Inc. PROVIDES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA CONTAINED IN THIS DOCUMENT**



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# PARTIAL LIST OF JOBS FURNISHED BY RPP

JOB	LOCATION	CONTRACTOR
Bay Care Med Center	Green Bay, WI	M.A. Mortenson Co.
Montgomery General Hospital	Olney, MD	H.B.E. Co.
Cleveland Clinic	Wooster, OH	Marshall Erdman
Fort Defiance Health Care	Fort Defiance, AZ	Border Glass & Aluminum
		Empire Lath & Plaster
		Flintco Construction
Elmdorf Air Force Base	Anchorage, AK	M.A. Mortenson
Mayo Clinic	Rochester, MN	Mulachy Drywall
Mayo Clinic	Rochester, MN	M.A. Mortenson
Mayo Clinic	Rochester, MN	Weis Builders
Hazardous Devices School	Redstone Arsenal, AL	
Travis Air Force Base	Travis AFB, CA	Newberg-Brinderson
Montefiore Medical Center	Bronx, NY	Nastasi & Associates
		Turner Construction
		M.A. Mortenson Co.
V.A. Medical Hospital	Minneapolis, MN	VVP America Inc. dba Binswanger Glass
Regional Medical Center	Fayetteville, AR	Olympic Wall Systems
GE Test Cells	Waukesha, WI	
Cessna Airlines	Wichita, KS	
Northwest Airlines	Minneapolis, MN	
Phillips Medical Systems	Scarborough, OH	
Syncor	Hicksville, NY	
U.S.L.E. Base	Sand Island, HI	Paglia Engineering
Smith Hospital	Valdosta, GA	Brasfield & Gorri
V.A. Hospital	Ann Arbor, MI	P.J. Dick
McMinnville Community Hospital	McMinnville, OR	McDevitt Street Bovis
Mary Washington Hospital	Fredricksburg, VA	Centex Rodgers



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