



MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

Trade Name:	Lead	Synonym:	Lead Metal
Chemical Nature:	Metallic Element	Formula:	Pb
CAS #:	7439-92-1	Formula Weight:	207.20

II HAZARDOUS INGREDIENTS

Hazardous Components	%	OSHA/PEL	ACGIH/TLV	Other Limits	Sec. 302	Sec. 304	Sec. 313
Lead	100	.05 mg (Pb)/m ³	.15 mg (Pb)/m ³	AL 30 ug/m ³	No	Yes	Yes

HMIS Ratings (0-4): Health: 4 Flammability: 0 Reactivity: 0

HMIS Protective Equipment: F: glasses, gloves, apron, dust mask.

III PHYSICAL DATA

Boiling Point 760 mm Hg:	1740 °C	Melting Point:	327.5 °C
Vapor Density (Air = 1):	N/A	Vapor Pressure (mm Hg):	1 mm at 973 °C
% Volatiles by Weight:	N/A	Solubility in H ₂ O:	Insoluble
Specific Gravity (Water = 1):	11.3437 at 16 °C	Evaporation Rate:	0
Appearance and Odor:	Silver-blue, white pieces and powder, no odor		

IV FIRE AND EXPLOSION HAZARDS DATA

Flash Point (Method used): N/A	Autoignition Temperature: N/A
Flammable Limits: Lower: N/A Upper: N/A	Flammability: Non-flammable

Extinguishing Media: Use suitable extinguishing media for surrounding materials and type of fire.

Special Fire Fighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire & Explosion Hazard: When heated to decomposition, lead may emit toxic fumes of lead oxide.

V HEALTH HAZARD INFORMATION

Routes of Entry: Inhalation, ingestion.

Effects of Over Exposure:

Some lead compounds are experimental neoplastigens and tumorigens. Lead poisoning is one of the commonest of occupational diseases. The lead must be in such form, and so distributed, as to gain entrance into the body or tissues of the worker in measurable quantity, otherwise no exposure can be said to exist. Some lead compounds are carcinogens of the lungs and kidneys. Lead is a cumulative poison. Increasing amounts build up in the body and eventually reach a point where symptoms and disability occur.

Acute Effects:

Inhalation: May cause irritation to the upper respiratory system, insomnia, dryness of the mouth and a metallic taste.

Ingestion: May cause constipation and abdominal pain, colic, tremors, nausea, vomiting, diarrhea, metallic taste, loss of appetite, irritability and muscle pain. May cause acute lead toxicity.

Skin: May cause irritation.

Eye: May cause irritation.

Chronic Effects:

Inhalation: May cause chronic lead toxicity. May be toxic to the central and peripheral nervous system affecting the cerebellum, spinal cord, motor and sensory nerves.

Ingestion: May cause anemia, gingival lead line, paralysis in the wrist and permanent neurological injury. May cause chronic lead toxicity. May cause nephritis, scarring and shrinking of the kidney tissue.

Skin: No chronic health effects recorded.

Eye: No chronic health effects recorded.

Target Organs: May affect the gastrointestinal tract, central nervous system, kidneys, blood, skin and the gingival tissue.

Medical Conditions Generally Aggravated by Exposure: Pre-existing lung and circulatory disorders.

Carcinogenicity: NTP: No IARC: No OSHA: Yes

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention immediately.

INGESTION: Give 1-2 glasses of milk or water and induce vomiting; seek medical attention immediately. Never induce vomiting or give anything by mouth to an unconscious person.

SKIN: Remove any contaminated clothing, brush material off of skin, wash affected area with mild soap and water; seek medical attention if symptoms persist.

EYES: Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.

VI REACTIVITY DATA

Stability: Stable

Conditions to Avoid: None

Incompatibility (Material to Avoid): Strong oxidizing agents, hydrogen peroxide, sodium acetylide and nitric acid and rubber.

Hazardous Decomposition Products: Fumes of lead oxide.

Hazardous Polymerization: Will not occur

VII SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled: Wear appropriate and protective equipment specified in section VIII. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Waste Disposal Method: In accordance with Local, State and Federal Waste Disposal Regulations.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): Filter - Dust, Fume, Mist

Ventilation: Local Exhaust: Use local exhaust to control dust and maintain concentration at or below the TLV, PEL. Mechanical exhaust is not recommended.

Protective Gloves: Rubber gloves.

Eye Protection: Safety Glasses

Other Protective Equipment: Protective gear suitable to prevent contamination.

IX SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storage: Store in a tightly sealed container in a cool, dry, well-ventilated area. Wash thoroughly after handling.

Work/Hygienic/Maintenance Practices: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sea Pearls shall not be held liable for any damage resulting from handling or from contact with the above product.