

GELEST, INC.

11 East Steel Rd. Morrisville, PA 129067 Phone: (215) 547-1015

MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **LEAD**, powder - PBL6180

CHEMICAL NAME: LEAD powder

SYNONYMS: PLUMBUM

CHEMICAL FAMILY: METALLIC LEAD

FORMULA: Pb

HMIS CODES HEALTH: 3 FLAMMABILITY: 0 REACTIVITY: 0

INGREDIENTS

IDENTITY CAS NO. % TLV OSHA PEL LEAD 7439-92-1 >97% 0.15 mg/m³ 0.05 mg/m³

PHYSICAL DATA

Boiling Point: 1740°C

Specific Gravity: 11.34

Vapor Density: NA

Melting Point: 327.4°C

Vapor Pressure, 973°: 1mm

Solubility in water: insoluble

% volatiles: 0 Evaporation rate: NA

Molecular Weight: 207.19 Other: N/A Appearance & Color: Silver-gray metallic powder

FIRE & EXPLOSION DATA

Flash Point, COC: NA Autoignition Temp.: NA

Flammability Limits- LEL: NA UEL: NA

Extinguishing Media: Not flammable.

Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale

vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

-1-(PBL6180)



ENVIRONMENTAL INFORMATION

Spill response: May be hazardous to aquatic life if released to open waters. Sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Dispose of as solid waste. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis which may be delayed sev-eral hours. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of dust or particulates will irritate the respiratory tract. Prolonged exposure to dust or fumes of lead may impair neurotransmission and immune system function.

Ingestion: Toxic. Large doses may cause nausea, vomiting, abdominal pains, diarrhea. May cause shock, coma and death in extreme cases due to acute encephalopathy. May cause permanent brain damage. Lead is a cumulative poison.

Oral Toxicity- rat, TDLo (lowest reported dose with toxic effect):790mg/kg

SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

SKIN: Flush with water, then wash with soap and water.

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

Physician note: Diagnostic mobilization of lead with calcium EDTA may be useful in questionable cases.



REACTIVITY DATA

Stability: Stable

Conditions to avoid: Contact or storage with hydrazoic acid, sodium azide, ammonium nitrate, chlorine, chlorinetrifluoride, sulfur dichloride, bromine, sulfur, strong oxidizing agents. Hazardous decomposition products: Lead, lead oxide particulates and fumes.

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved dust and particle respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency

shower should be available. Launder clothing before reuse.

OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: CHEMICALS, NOI DOT HAZARD CLASS: None required

DOT LABEL: None required DOT ID No: None required

Prepared by safety and environmental affairs ISSUE DATE PBL6180: 11/24/03

SUPERSEDES: 6/11/96

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-3-(PBL6180)