



Material Safety Data Sheet

24-HOUR EMERGENCY CONTACT
 (336) 650-7245/7257
 CHEMTREC (800) 424-9300

HMIS Hazard Rating

| | |
|--------------|---|
| HEALTH | 3 |
| FLAMMABILITY | 1 |
| REACTIVITY | 0 |

0 Minimal Hazard
 1 Slight Hazard
 2 Moderate Hazard
 3 Serious Hazard
 4 Severe Hazard

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 Product Information (800) 368-4527

Date Revised: 1/05
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SECTION 1 – IDENTITY

Chemical Name: LEAD OXIDE PASTE (Wet or Dry) **Common Synonyms:** Lead paste
Common Name: Active Material **Chemical Family:** Lead oxide
Product Use: Component of lead/acid battery **Formula:** NA
DOT Shipping Name: Refer to Title 49 Code of Federal Regulations

SECTION 2 – HAZARDOUS INGREDIENTS

| Principal Hazardous Component(s) (chemical & common name(s)) | C.A.S. | Hazard Category | % | ACGIH TLV | OSHA PEL/TWA |
|---|-----------|-----------------|----|-----------------------|--|
| Lead Oxide | 7439-92-1 | Acute/Chronic | 93 | NA | NA |
| Barium sulfate expander | 7727-43-7 | Chronic | 1 | 10 mg/m ³ | 10 mg/m ³ (total) 5 mg/m ³ (respirable) |
| Sulfuric acid | 7664-93-9 | Reactive/Oxid. | 6 | 1.0 mg/m ³ | 1.0 mg/m ³ |

This Product description or Tradename contains toxic chemicals subject to reporting requirements under Section 313 of Title III the "Superfund Amendments and Reauthorization Act" of 1986 and 40 CFR 372 and California Proposition 65.

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point: H₂SO₄, 235° F **Vapor Pressure:** 1mmHg @ 145.8°F **Vapor Density (Air = 1):** H₂SO₄ 3.4 **Specific Gravity:**

Melting Point: Lead 327°F

Percent Volatile by Volume (%): NA

Reactivity in Water: None **Solubility in Water:** Slight

Appearance and Odor: Red or brown paste

Physical State: Semi-solid paste **PH:** NA

Flash Point: NA **Flammable Limits in Air% by Volume:** NA **Upper** NA **Lower** NA **Auto-Ignition Temperature:** NA

Extinguisher Media: NA

Special Fire Fighting Procedures: Will not burn. For surrounding fires wear full body protective clothing, respirator, SCBA

Unusual Fire and Explosion Hazards: Fumes and dust from molten metal or dry lead oxide powder can produce respiratory irritation.

SECTION 4 – PHYSICAL HAZARDS

Stability: Stable

Incompatibility:

(Materials to Avoid) Sodium, potassium, aluminum, metal sulfides, strong oxidizers, hydrogen peroxide, hydrogen sulfides, nitrogen compounds.

Hazardous Decomposition Products: When heated to decomposition emits toxic fumes of lead, dry form can emit lead containing dust.

Hazardous Polymerization: Will Not Occur

SECTION 5 – HEALTH HAZARDS

Threshold Limit Value (TLV)/Permissible exposure limit (PEL): Lead TLV 0.15 mg/m³ PEL 0.05 mg/m³

Signs and Symptoms of Exposure

1. Chronic: Elevated blood lead level. Tire easily, loss of appetite, irritability, metallic taste, insomnia, toxic to nervous system, kidneys, and reproductive system.
2. Acute: Constipation, vomiting, blue line on gums, weak wrists or ankles, weight loss, yellowish skin.

Medical Conditions Generally Aggravated by Exposure:

Harmful effects of lead are increased for a person with dietary deficiencies in calcium, iron, and zinc.

Routes of Entry: Inhalation, Ingestion.

Chemical Listed as carcinogen or Potential Carcinogen: Lead

National Toxicology Program Yes No

I.A.R.C. Monographs Yes No

OSHA Yes No

EPA CAG Yes No

Human Health Effects:

Emergency and First Aid Procedures

1. Inhalation: Remove from exposure, see physician.
 2. Eyes: (Powder oxide): Wash eyes with copious quantities of running water for 15 minutes. Obtain medical attention.
 3. Skin: Not a direct route of entry.
 4. Ingestion: See physician.
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SECTION 6 – SPECIAL PROTECTION INFORMATION

Respiratory Protection: PAPR, full face or half face mask respirator with HEPA cartridges.

Ventilation: Local exhaust for pasting areas

Protective Gloves: Recommended to reduce personal exposure to lead.

Eye Protection: Safety glasses with side shields or face shield.

Other Protective Equipment: Full body clothing should be worn in lead areas and laundered after each use.

SECTION 7 – SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

Precautions to Be Taken: Store lead oxide in a dry area with little air movement. Do not breathe dust. Monitor ambient air for work exposure, control exposure to OSHA PEL levels for workers by ventilation or approved respiratory protection.

Other Precautions: Street clothing, food, drinks, cosmetics, and tobacco products should be stored in non-lead contaminated areas.

Material Spills or Release: Dry material should be vacuumed or wetted and swept up without creating dust. Do not dry sweep or use compressed air. Residue may be picked up by wet mopping with dilute solution of acetic acid or vinegar.

Waste Disposal Methods: Dispose of toxic substances and hazardous wastes in accordance with local, state, and federal regulations.

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