



Health	2
Fire	1
Reactivity	0
Personal Protection	E

## Material Safety Data Sheet

### Lead acetate trihydrate MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** Lead acetate trihydrate

**Catalog Codes:** SLL1246, SLL1624

**CAS#:** 6080-56-4

**RTECS:** OF8050000

**TSCA:** TSCA 8(b) inventory: No products were found.

**CI#:** Not available.

**Synonym:** Lead Acetate; Lead (II) trihydrate; Acetic acid lead (II) salt, trihydrate

**Chemical Name:** Lead Acetate Trihydrate

**Chemical Formula:**  $Pb(CH_3COO)_2 \cdot 3H_2O$

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

#### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Lead acetate trihydrate	6080-56-4	100

**Toxicological Data on Ingredients:** Lead acetate trihydrate: ORAL (LD50): Acute: 4665 mg/kg [Rat].

#### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

**Potential Chronic Health Effects:**

Hazardous in case of skin contact (permeator), of ingestion, of inhalation. CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. MUTAGENIC EFFECTS: Classified POSSIBLE for human. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE]. The substance may be toxic to blood, kidneys, the nervous system, the reproductive system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

#### Section 4: First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:**

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not available.

**Flammable Limits:** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>). Some metallic oxides.

**Fire Hazards in Presence of Various Substances:**

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage

**Precautions:**

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as acids.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:**

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**

TWA: 0.05 (mg (Pb)/m) from OSHA (PEL) [United States] TWA: 0.15 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Solid. (Crystalline solid.)

**Odor:** Acetic (Slight.)

**Taste:** Not available.

**Molecular Weight:** 379.32 g/mole

**Color:** White.

**pH (1% soln/water):** Not available.

**Boiling Point:** Decomposition temperature: 100°C (212°F)

**Melting Point:** 75°C (167°F)

**Critical Temperature:** Not available.

**Specific Gravity:** 2.55 (Water = 1)

**Vapor Pressure:** Not applicable.

**Vapor Density:** Not available.

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water.

**Solubility:** Soluble in cold water.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Excess heat, and incompatible materials

**Incompatibility with various substances:** Reactive with acids.

**Corrosivity:** Not available.

**Special Remarks on Reactivity:** Incompatible with Bromates, Phenol Chloral Hydrate, sulfides, and acids.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 4665 mg/kg [Rat].

### Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. MUTAGENIC EFFECTS: Classified POSSIBLE for human. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE]. May cause damage to the following organs: blood, kidneys, the nervous system, the reproductive system, central nervous system (CNS).

### Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

**Special Remarks on Toxicity to Animals:** Not available.

### Special Remarks on Chronic Effects on Humans:

May affect genetic material based on animal data May cause cancer (tumorigenic) based on animal data. May cause adverse reproductive effects (female/male fertility and other female/male effects) and birth defects based on animal data. Passes through the placental barrier in animal. Excreted in maternal milk in animal.

### Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause severe local irritation. Eyes: May cause local irritation or abrasion. Lead acetate can produce encrustation of the cornea with direct eye exposure. Inhalation: Can be absorbed through the respiratory system. May cause respiratory tract irritation (local irritaiton of the bronchia, and lungs). Symptoms such as metallic taste, chest and abdominal pain, and increased lead blood levels may follow. Also see symptoms of ingestion. Ingestion: May cause gastrointestinal tract irritation. May affect behavior/brain, metabolism, liver, cardiovascular system, urinary system, and blood. Ingestion can result in lead colic, headache, abdominal cramps, nausea, muscle weakness, depression, "lead line" on the gums, metallic taste, loss of appetite, insomnia, dizziness, high lead levels in the blood and urine, with shock, coma and death in extreme cases. Chronic Potential Health Effects: Skin: May be absorbed through the skin on prolonged exposure. See symptoms of ingestion. Ingestion/Inhalation: The hallmarks of chronic lead poisoning are peripheral motor polyneuropathy, ANEMIA, KIDNEY DAMAGE, HYPERTENSION. Also see symptoms of acute poisoning.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

### Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

### Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14: Transport Information

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** : Lead acetate UNNA: 1616 PG: III

**Special Provisions for Transport:** Marine Pollutant

### Section 15: Other Regulatory Information

**Federal and State Regulations:**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead acetate trihydrate California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Lead acetate trihydrate California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Lead acetate trihydrate California prop. 65 (no significant risk level): Lead acetate trihydrate: 0.023 mg/day (value) California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead acetate trihydrate California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead acetate trihydrate Connecticut hazardous material survey.: Listed as Acetic Acid, lead (2+) Salt Illinois toxic substances disclosure: Listed as Acetic Acid, lead (2+) Salt Illinois chemical safety act: Listed as Acetic Acid, lead (2+) Salt New York release reporting list: Listed as Lead acetate Pennsylvania RTK: Listed as Acetic Acid, lead (2+) Salt Minnesota: Lead Acetate Massachusetts RTK: Listed as Lead acetate; Listed as Acetic Acid, Lead Salt Massachusetts spill list: Listed as Acetic Acid, lead Salt; Listed as Lead Acetate New Jersey: Listed as Lead acetate New Jersey spill list: Listed as Lead acetate Louisiana spill reporting: Listed as Acetic Acid, lead (2+) Salt; Listed as Lead Acetate; Listed as Acetic Acid, Lead Salt California Director's List of Hazardous Substances: Listed as Lead acetate SARA 313 toxic chemical notification and release reporting: Lead compounds CERCLA: Hazardous substances. Listed as Acetic Acid, lead (2+) Salt; Listed as Lead Acetate: 10 lbs. (4.536 kg)

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:**

**WHMIS (Canada):**

CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC):**

R33- Danger of cumulative effects. R48/22- Harmful: danger of serious damage to health by prolonged exposure if swallowed. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R61- May cause harm to the unborn child. R62- Possible risk of impaired fertility. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S53- Avoid exposure - obtain special instructions before use. S60- This material and its container must be disposed of as hazardous waste. S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

**HMIS (U.S.A.):**

**Health Hazard:** 2

**Fire Hazard:** 1

**Reactivity:** 0

**Personal Protection:** E

**National Fire Protection Association (U.S.A.):**

**Health:** 2

**Flammability:** 1

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

## Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

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