Material Safety Data Sheet

Section 1 - Product and Company Information
Product Name: LEAD(II) ACETATE TRIHYDRATE, 90+%, A.C.S., REAGENT
Product Number: 215902
Brand: Aldrich Chemical
Company: Sigma-Aldrich
Street Address: 3800 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 800 325 0262
Emergency Phone: 414 273 3650 Ext. 5966

Section 2 - Composition/Information on Ingredient
Substance Name: LEAD ACETATE TRIHYDRATE: ACS REAGENT
CAS #: 6060-56-4
SARA 313: Yes
Formula: (C2H3O2)2Pb.3H2O
Synonyms: Acetic acid, lead(II) salt, trihydrate, Bis(acetato)trihydroxylead, Bleisatzit (German), Lead diacetate trihydrate

Section 3 - Hazards Identification
Emergency Overview:
Toxic. May cause cancer. May impair fertility. May cause heritable genetic damage. Danger of cumulative effects. Toxic by inhalation, in contact with skin, and if swallowed.
Target organ(s): Nerves, Blood
HMIS Rating:
Health: 4
Flammability: 0
Reactivity: 1
NFPA Rating:
Health: 4
Flammability: 0
Reactivity: 1
For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures
Oral Exposure: If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
Dermal Exposure: In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures
Autoignition Temp: N/A
Extinguishing Media:
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting:
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures
Procedure to be Followed in Case of Leak or Spill: Evacuate area.
Procedure(s) of Personal Precaution(s): Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

Methods for Cleaning Up: Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage
Handling:
User Exposure: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Avoid prolonged or repeated exposure.

Storage:
Suitable: Keep tightly closed. Store in a cool dry place.

Special Requirements: Absorbs CO2 from air. Light sensitive

Section 8 - Exposure Controls / PPE
Engineering Controls: Use only in a chemical fume hood. Safety shower and eye bath.

Personal Protective Equipment
Respiratory: Government approved respirator in nonventilated areas and/or for exposure above the TLV or PEL.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.

General Hygiene Measures: Wash contaminated clothing before reuse. Wash thoroughly after handling.

Exposure Limits, RTECS
Aldrich Chemical - 215902
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Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Form</td>
<td>Fine crystals</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>379.33 AMU</td>
</tr>
<tr>
<td>pH</td>
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</tr>
<tr>
<td>BP/BP Range</td>
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<tr>
<td>MP/MP Range</td>
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<tr>
<td>Freezing Point</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Vapor Density</td>
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<tr>
<td>Saturated Vapor Conc.</td>
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<tr>
<td>Sg/Density</td>
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<tr>
<td>Bulk Density</td>
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<tr>
<td>Odor Threshold</td>
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<tr>
<td>Volatility%</td>
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</tr>
<tr>
<td>VOC Content</td>
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</tr>
<tr>
<td>Water Content</td>
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<tr>
<td>Solvent Content</td>
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<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Viscosity</td>
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<tr>
<td>Partition Coefficient</td>
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<tr>
<td>Decomposition Temp.</td>
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<tr>
<td>Flash Point °F</td>
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<tr>
<td>Flash Point °C</td>
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<tr>
<td>Explosion Limits</td>
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<td>Flammability</td>
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<tr>
<td>Autoignition Temp</td>
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</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A = not available</td>
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</tbody>
</table>

Section 10 - Stability and Reactivity

| Stability                        |              |
| Conditions of Instability       | May decompose on exposure to light |
| Materials to Avoid              | Strong acids. |

| Hazardous Decomposition Products|              |
| Carbon monoxide, Carbon dioxide, Lead/lead oxides. |
Section 15 - Regulatory Information

EU Directives Classification
Symbol of Danger: T N
Indication of Danger
Toxic, Dangerous for the environment.
Risk Statements
R: 61 33 4622 5053 62
May cause harm to the unborn child. Danger of cumulative effects. Also harmful danger of serious damage to health by prolonged exposure if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of impaired fertility.
Safety Statements
S: 53 45 61
Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid release to the environment. Refer to special instructions/safety data sheets.

US Classification and Label Text
Indication of Danger
Toxic.
Risk Statements
May cause cancer. May impair fertility. May cause heritable genetic damage. Danger of cumulative effects. Toxic by inhalation, in contact with skin, and if swallowed.
Safety Statements
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wear suitable protective clothing, gloves, and eye/face protection. Do not breathe dust.

United States Regulatory Information
SARA Listed: Yes
Demarcation: 1.0 %
Notes: This product is subject to SARA section 313 reporting requirements - lead compounds.

Canada Regulatory Information
WHMIS Classification
This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: No
NURS: No

Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.