1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers
Product name: Lead(II) acetate trihydrate
Product Number: 316512
Brand: Aldrich
Index-No.: 082-005-00-8
CAS-No.: 6080-56-4

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet
Company: Sigma-Aldrich Inc.
3050 Spruce Street
ST. LOUIS MO  63103
UNITED STATES
Telephone: +1 314 771-5765
Fax: +1 800 325-5052

1.4 Emergency telephone number
Emergency Phone #: +1-703-527-3887

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Reproductive toxicity (Category 1A), H360
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements
Pictogram

Signal word: Danger
Hazard statement(s)
H360 May damage fertility or the unborn child.
H410 Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead di(acetate) trihydrate</td>
<td>Repr. 1A; Aquatic Acute 1; Aquatic Chronic 1; H360, H410</td>
<td>&lt;= 100 %</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Lead oxides

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustion should be taken into consideration before additional processing.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Light sensitive. Air sensitive. Handle and store under inert gas.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead di(acetate) trihydrate</td>
<td>6080-56-4</td>
<td>TWA</td>
<td>0.050000 mg/m3</td>
<td>USA, ACGIH Threshold Limit Values (TLV)</td>
</tr>
</tbody>
</table>

Remarks
Central Nervous System impairment
Hematologic effects
Peripheral Nervous System impairment
Substances for which there is a Biological Exposure Index or Indices (see BEI® section)
Confirmed animal carcinogen with unknown relevance to humans

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA</td>
<td>0.050000 mg/m3</td>
<td>USA, NIOSH Recommended Exposure Limits</td>
<td></td>
</tr>
<tr>
<td>See Appendix C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA</td>
<td>0.05 mg/m3</td>
<td>USA, NIOSH Recommended Exposure Limits</td>
<td></td>
</tr>
<tr>
<td>See Appendix C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

- **Full contact**
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min
  - Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

- **Splash contact**
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min
  - Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industry situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If the full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

---

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- **Appearance**
  - Form: solid
  - Colour: white

- **Odour**
  - No data available

- **Odour Threshold**
  - No data available

- **pH**
  - No data available

- **Melting point/freezing point**
  - Melting point/range: 75 °C (167 °F) - dec.

- **Initial boiling point and boiling range**
  - No data available

- **Flash point**
  - No data available

- **Evaporation rate**
  - No data available

- **Flammability (solid, gas)**
  - No data available

- **Upper/lower flammability or explosive limits**
  - No data available
### 9.2 Other safety information
No data available

### 10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong acids, Strong oxidizing agents

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Lead oxides
Other decomposition products - No data available
In the event of fire: see section 5

### 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

**Acute toxicity**
- LD50 Oral - Rat - 4,665 mg/kg(Lead di(acetate) trihydrate)
- Inhalation: No data available(Lead di(acetate) trihydrate)
- Dermal: No data available(Lead di(acetate) trihydrate)
- No data available(Lead di(acetate) trihydrate)

**Skin corrosion/irritation**
No data available(Lead di(acetate) trihydrate)

**Serious eye damage/eye irritation**
No data available(Lead di(acetate) trihydrate)

**Respiratory or skin sensitisation**
No data available(Lead di(acetate) trihydrate)

**Germ cell mutagenicity**
May alter genetic material.(Lead di(acetate) trihydrate)
**Carcinogenicity**
This is or contains a component that has been reported to be carcinogenic classification.(Lead di(acetate) trihydrate) (Lead di(acetate) trihydrate)

IARC: 2A - Group 2A: Probably carcinogenic to humans (Lead di(acetate) trihydrate)

IARC: 2A - Group 2A: Probably carcinogenic to humans (Lead di(acetate) trihydrate)

NTP: RAHC - Reasonably anticipated to be a human carcinogen
The reference note has been added by TD based on the background information of the NTP. (Lead di(acetate) trihydrate)

NTP: RAHC - Reasonably anticipated to be a human carcinogen
The reference note has been added by TD based on the background information of the NTP. (Lead di(acetate) trihydrate)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
Known human reproductive toxicant (Lead di(acetate) trihydrate)
May cause reproductive disorders. (Lead di(acetate) trihydrate)

**Specific target organ toxicity - single exposure**
No data available(Lead di(acetate) trihydrate)

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available(Lead di(acetate) trihydrate)

**Additional Information**
RTECS: OF8050000

Lead salts have been reported to cross the placenta and to induce embryo- and feto- mortality. They also have teratogenic effect in some animal species. No teratogenic effects have been reported with exposure to organometallic lead compounds. Adverse effects of lead on human reproduction, embryonic and fetal development, and postnatal (e.g., mental) development have been reported. Excessive exposure can affect blood, nervous, and digestive systems. The synthesis of hemoglobin is inhibited and results in anemia. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result. Additional symptoms of overexposure include: joint and muscle pain, weakness of the extensor muscles (frequently the hand and wrist), headache, dizziness, abdominal pain, diarrhea, constipation, nausea, vomiting, blue line on the gums, insomnia, and metallic taste. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death., May cause convulsions.(Lead di(acetate) trihydrate)

Stomach - Irregularities - Based on Human Evidence
Stomach - Irregularities - Based on Human Evidence(Lead di(acetate) trihydrate)

**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available(Lead di(acetate) trihydrate)
12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN number: 1616 Class: 6.1 Packing group: III
Proper shipping name: Lead acetate
Reportable Quantity (RQ) : 10 lbs

Poison Inhalation Hazard: No

IMDG
UN number: 1616 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: LEAD ACETATE
Marine pollutant : yes Marine pollutant : yes

IATA
UN number: 1616 Class: 6.1 Packing group: III
Proper shipping name: Lead acetate

15. REGULATORY INFORMATION

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right To Know Components

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Revision Date</th>
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<tbody>
<tr>
<td>Lead di(acetate) trihydrate</td>
<td>6080-56-4</td>
<td>1993-04-24</td>
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Pennsylvania Right To Know Components

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New Jersey Right To Know Components

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California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

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<th>Revision Date</th>
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<td>Lead di(acetate) trihydrate</td>
<td>6080-56-4</td>
<td>2007-09-28</td>
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</table>
WARNING! This product contains a chemical known to the State of California to cause cancer.
Lead di(acetate) trihydrate

CAS-No. 6080-56-4
Revision Date 2007-09-28

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H360 May damage fertility or the unborn child.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

HMIS Rating
Health hazard: 1
Chronic Health Hazard: *
Flammability: 0
Physical Hazard 0

NFPA Rating
Health hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0

Further information
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Preparation Information
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956
Version: 6.2 Revision Date: 05/28/2017 Print Date: 08/08/2017