Material Safety Data Sheet
Lead(II) acetate trihydrate

ACC# 12530

Section 1 - Chemical Product and Company Identification

MSDS Name: Lead(II) acetate trihydrate
Catalog Numbers: AC201750000, AC201750050, AC201750250, AC201755000, AC317230000, AC317230250, AC423840000, AC423840250, AC423845000, NC9271681, S80050, S93272, S93273, L33-250, L33-500
Synonyms: Acetic acid, lead (+2) salt trihydrate; Lead diacetate trihydrate; Plumbous acetate trihydrate; Sugar of lead, trihydrate.
Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
6080-56-4	Acetic acid, lead(2+) salt trihydrate	100	unlisted

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white solid.
Warning! May cause harm to the unborn child. May cause eye, skin, and respiratory tract irritation. Possible risk of impaired fertility. Danger of serious damage to health by prolonged exposure if swallowed. May cause cancer based on animal studies. May cause kidney damage. Affects the blood-forming organs. Air sensitive. Danger of cumulative effects. Marine pollutant.
Target Organs: Kidneys, central nervous system, blood forming organs.

Potential Health Effects
Eye: May result in corneal injury. May cause irreversible eye injury. Exposure to particulates or solution may cause conjunctivitis, ulceration, and corneal abnormalities.
Skin: May cause skin irritation.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage.
Inhalation: May cause respiratory tract irritation.
Chronic: Chronic exposure may cause blood effects. May cause kidney damage.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician: Treat symptomatically and supportively.
Antidote: The use of Calcium disodium EDTA as a chelating agent should be determined by qualified medical personnel. The use of d-Penicillamine as a chelating agent should be determined by qualified medical personnel. The use of Dimercaprol or BAL (British Anti-Lewisite) as a chelating agent should be determined by qualified medical personnel.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Flash Point: Not available.
Autoignition Temperature: Not available.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 1

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation. Place under an inert atmosphere.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Handle under an inert atmosphere. Store protected from air. Wash clothing before reuse.
Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed. Do not expose to air. Store under an inert atmosphere.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Acetic acid, lead(2+) salt trihydrate	none listed	0.050 mg/m3 TWA (as Pb) (listed under Lead compounds).	none listed
Lead acetate anhydrous	none listed	0.050 mg/m3 TWA (as Pb) (listed under Lead compounds).	none listed
Lead	0.05 mg/m3 TWA	0.050 mg/m3 TWA 100 mg/m3 IDLH	50 æg/m3 PEL (as Pb); 30 æg/m3 Action Level (as Pb. Poison - see 29 CFR 1910.10 25)

OSHA Vacated PELs: Acetic acid, lead(2+) salt trihydrate: No OSHA Vacated PELs are listed for this chemical. Lead acetate anhydrous: No OSHA Vacated PELs are listed for this chemical. Lead: No OSHA Vacated PELs are listed for this chemical.
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: white
Odor: acetic odor - weak odor
pH: 5.5-6.5 (5% aq soln)
Vapor Pressure: 0 atm at 30 C
Vapor Density: 13.1
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: decomposes
Freezing/Melting Point:75 deg C
Decomposition Temperature:200 deg C
Solubility: Soluble.
Specific Gravity/Density:2.55
Molecular Formula: Pb(C2H3O2)2.3H2O
Molecular Weight:379.2798

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. Takes up CO2 from air and becomes incompletely soluble. Slowly effloresces (loses water molecules of hydration) on exposure to air.
Conditions to Avoid: Dust generation, exposure to air, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, lead/lead oxides.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:
CAS# 6080-56-4: OF8050000

CAS# 301-04-2: AI5250000
CAS# 7439-92-1: OF7525000
LD50/LC50:
CAS# 6080-56-4:
Oral, rat: LD50 = 4665 mg/kg;
.

CAS# 301-04-2:
.

CAS# 7439-92-1:
.

Carcinogenicity:
CAS# 6080-56-4:

- **ACGIH:** Not listed.
- **California:** carcinogen, initial date 10/1/92 (listed as Lead compounds).
- **NTP:** Suspect carcinogen (listed as Lead compounds).
- **IARC:** Not listed.

CAS# 301-04-2:

- **ACGIH:** Not listed.
- **California:** carcinogen, initial date 1/1/88
- **NTP:** Suspect carcinogen (listed as Lead compounds).
- **IARC:** Not listed.

CAS# 7439-92-1:

- **ACGIH:** A3 - Confirmed animal carcinogen with unknown relevance to humans
- **California:** carcinogen, initial date 10/1/92
- **NTP:** Suspect carcinogen
- **IARC:** Group 2B carcinogen

Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Mutagenicity: No data available.
Neurotoxicity: No data available.
Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series:
CAS# 301-04-2: waste number U144.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	LEAD ACETATE	LEAD ACETATE
Hazard Class:	6.1	6.1
UN Number:	UN1616	UN1616
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 6080-56-4 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).
CAS# 301-04-2 is listed on the TSCA inventory.
CAS# 7439-92-1 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 301-04-2: 10 lb final RQ; 4.54 kg final RQ CAS# 7439-92-1: 10 lb final RQ (no reporting of releases of this hazardous substance is required

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 6080-56-4: immediate, delayed.
CAS # 301-04-2: immediate, delayed.
CAS # 7439-92-1: immediate, delayed.

Section 313

This material contains Lead (CAS# 7439-92-1, -%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 6080-56-4 (listed as Lead compounds) is listed as a hazardous air pollutant (HAP).
CAS# 301-04-2 (listed as Lead compounds) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 301-04-2 is listed as a Hazardous Substance under the CWA. CAS# 7439-92-1 is listed as a Priority Pollutant under the Clean Water Act. CAS# 6080-56-4 is listed as a Toxic Pollutant under the Clean Water Act. CAS# 301-04-2 is listed as a Toxic Pollutant under the Clean Water Act. CAS# 7439-92-1 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 6080-56-4 can be found on the following state right to know lists: California, (listed as Lead compounds), New Jersey, (listed as Lead compounds), Pennsylvania, (listed as Lead compounds).

CAS# 301-04-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 7439-92-1 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:

WARNING: This product contains Acetic acid, lead(2+) salt trihydrate, listed as `Lead compounds', a chemical known to the state of California to cause cancer. WARNING: This product contains Lead acetate anhydrous, a chemical known to the state of California to cause cancer. WARNING: This product contains Lead, a chemical known to the state of California to cause cancer. WARNING: This product contains Lead, a chemical known to the state of California to cause male reproductive toxicity.
California No Significant Risk Level: CAS# 301-04-2: 23 æg/day NSRL (oral) CAS# 7439-92-1: 15 æg/day NSRL (oral)

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

T N

Risk Phrases:

R 33 Danger of cumulative effects.
R 48/22 Harmful : danger of serious damage to health by prolonged exposure if swallowed.
R 61 May cause harm to the unborn child.
R 62 Possible risk of impaired fertility.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 53 Avoid exposure - obtain special instructions before use.
S 60 This material and its container must be disposed of as hazardou s waste.
S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

WGK (Water Danger/Protection)

CAS# 6080-56-4: 2
CAS# 301-04-2: 2
CAS# 7439-92-1: No information available.

Canada - DSL/NDSL

CAS# 301-04-2 is listed on Canada's DSL List.
CAS# 7439-92-1 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2A, D1B.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 6080-56-4 is not listed on the Canadian Ingredient Disclosure List.
CAS# 301-04-2 is listed on the Canadian Ingredient Disclosure List.
CAS# 7439-92-1 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 7/28/1998
Revision #6 Date: 7/21/2006