

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, AC317230050, 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	Lead(II) acetate trihydrate	>97	unlisted

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white crystalline powder.

Warning! May cause harm to the unborn child. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of impaired fertility. May cause cancer in humans. Danger of serious damage to health by prolonged exposure if swallowed. Danger of cumulative effects.**Target Organs:** Kidneys, central nervous system, blood forming organs.**Potential Health Effects****Eye:** May cause eye irritation.**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.**Ingestion:** May cause adverse effects of the musculature. May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea. Exposure may cause anemia and other blood abnormalities. May be harmful if swallowed.**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

Chronic: May cause digestive tract disturbances. Prolonged or repeated exposure may cause nausea, dizziness, and headache. There is a danger of cumulative effects. May impair fertility.

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. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician: Treat symptomatically and supportively.

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.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

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: Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container. Keep under a nitrogen blanket.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Lead(II) acetate trihydrate	none listed	0.050 mg/m ³ TWA (as Pb) (listed under Lead compounds).	none listed
Lead acetate anhydrous	none listed	0.050 mg/m ³ TWA (as Pb) (listed under Lead compounds).	none listed
Lead	0.05 mg/m ³ TWA	0.050 mg/m ³ TWA 100 mg/m ³ IDLH	50 æg/m ³ TWA; 50 æg/m ³ TWA (as Pb); 30 æg/m ³ Action Level (as Pb. Poison - see 29 CFR 1910.10 25)

OSHA Vacated PELs: Lead(II) acetate 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: Crystalline powder

Appearance: white

Odor: acetic odor - weak odor

pH: 5.5 - 6.5 (5% aq.solution)

Vapor Pressure: Not available.

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: 625 g/L

Specific Gravity/Density: 2.55

Molecular Formula: C₄H₆O₄Pb.3H₂O

Molecular Weight: 379.33

Section 10 - Stability and Reactivity

Chemical Stability: Air sensitive.

Conditions to Avoid: Incompatible materials, light, dust generation, exposure to air.

Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong acids, alcohols.

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 2A carcinogen

Epidemiology: Tumorigenic effects have been reported in experimental animals.
Teratogenicity: Teratogenic effects have occurred in experimental animals.
Reproductive Effects: Adverse reproductive effects have occurred in experimental animals.
Mutagenicity: Mutagenic effects have occurred in experimental animals.
Neurotoxicity: No information found
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: No information available.
Physical: No information available.
Other: Do not empty into drains.

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 Lead(II) acetate 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 hazardous 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 #7 Date: 7/16/2007

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.