

Material Safety Data Sheet

Lead Acetate



Section 1. Product and Company Identification

Product name	: Lead Acetate
Product code	: LX0120
Synonym	: plumbous acetate
Material uses	: Industrial applications: Analytical reagent. Other non-specified industry: Analytical reagent.
Manufacturer	: EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 856-423-6300 Technical Service Monday - Friday: 8:00 - 5:00 PM
Validation date	: 6/9/2006.
Print date	:
In case of emergency	: 800-424-9300 CHEMTREC (USA) 613-996-6666 CANUTEC (Canada) 24 Hours/Day: 7 Days/Week

Section 2. Hazards Identification

Physical state	: Solid. (Crystals or powder)
Odor	: Acetic acid. (Slight.)
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview	: WARNING! HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. SUSPECT CANCER HAZARD. MAY CAUSE CANCER. CAN CAUSE BIRTH DEFECTS. BIRTH DEFECT HAZARD. Cumulative Poison WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Risk of cancer depends on duration and level of exposure.
Routes of entry	: Dermal contact. Inhalation. Ingestion.
Potential acute health effects	
Eyes	: No known significant effects or critical hazards.
Skin	: Toxic in contact with skin.
Inhalation	: Toxic by inhalation.
Ingestion	: Toxic if swallowed.
Carcinogenic effects	: May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenicity / Reproductive toxicity	: No known significant effects or critical hazards.

See toxicological information (section 11)

Section 3. Composition/Information on Ingredients

United States

Name	CAS number	% by Weight
Lead diacetate, trihydrate	6080-56-4	100

Section 4. First Aid Measures

- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.
- Skin contact** : Get medical attention immediately. Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Fire Fighting Measures

- Flammability of the product** : No specific hazard.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : Not available.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental Release Measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal by incineration. Avoid creating dusty conditions and prevent wind dispersal.

Section 7. Handling and Storage

- Handling** : Do not ingest. Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Product name **Exposure limits**

United States

lead diacetate, trihydrate ACGIH TLV (United States, 1/2005).

Notes: Substance identified by other sources as a suspected or confirmed human carcinogen. 1995-1996

Adoption. Substances for which there is a Biological Exposure Index or Indices Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH

Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL. See Notice of Intended changes.

TWA: 0.05 mg/m³ 8 hour/hours. Form: All forms

OSHA PEL 1989 (United States, 3/1989). Notes: Sec. 1910.1025 Lead.

TWA: 50 µg/m³ 8 hour/hours. Form: All forms

Consult local authorities for acceptable exposure limits.

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Recommended: splash goggles

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Recommended: disposable particulate mask

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and Chemical Properties

Physical state : Solid. (Crystals or powder)
Color : White.
Odor : Acetic acid. (Slight.)
Molecular weight : 379.35 g/mole
Molecular formula : C₄-H₆-O₄.Pb.₃H₂-O
Boiling/condensation point : Decomposition temperature: 200°C (392°F)
Melting/freezing point : 75°C (167°F)
Relative density : 2.55 (Water = 1)

Section 10. Stability and Reactivity

Stability and reactivity : The product is stable.
Conditions of instability : SLOWLY EFFLORESCE IN AIR
Incompatibility with various substances : Reactive or incompatible with the following materials: acids.
INCOMPATIBLE WITH KBrO₃
Avoid Heat

Hazardous decomposition products : Thermal decomposition may release toxic and/or hazardous gases. Carbon Monoxide, Lead dioxide
Hazardous polymerization : Will not occur.

Section 11. Toxicological Information

Toxicity data

United States

Product/ingredient name	Test	Result	Route	Species
Lead Acetate trihydrate	LD50	4665 mg/kg	Oral	Rat
Chronic effects on humans	: CARCINOGENIC EFFECTS: Classified A3 (Proven for animals.) by ACGIH. Classified 2 (Reasonably anticipated to be human carcinogens.) by NTP. 3 (Not classifiable for humans.) by IARC.			
Other toxic effects on humans	: Extremely hazardous in case of skin contact (permeator), of ingestion, of inhalation. Slightly hazardous in case of eye contact (irritant).			
Special remarks on other toxic effects on humans	: Cumulative Poison			
Specific effects				
Carcinogenic effects	: May cause cancer. Risk of cancer depends on duration and level of exposure.			
Mutagenic effects	: No known significant effects or critical hazards.			
Teratogenicity / Reproductive toxicity	: No known significant effects or critical hazards.			
Sensitization				
Ingestion	: No known significant effects or critical hazards.			
Inhalation	: No known significant effects or critical hazards.			
Eyes	: No known significant effects or critical hazards.			
Skin	: No known significant effects or critical hazards.			

Section 12. Ecological Information

Environmental precautions : No known significant effects or critical hazards.
Products of degradation : These products are carbon oxides (CO, CO₂) and water. Some metallic oxides.
Toxicity of the products of biodegradation : The products of degradation are less toxic than the product itself.

Section 13. Disposal Considerations


Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification	UN1616	Lead Acetate	6.1	III		Reportable quantity 10 lbs. (4.54 kg)

Section 15. Regulatory Information

United States

- HCS Classification** : Toxic material
Carcinogen
- U.S. Federal regulations** : TSCA 8(b) inventory: Listed

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: lead diacetate, trihydrate
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: lead diacetate, trihydrate: Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: lead diacetate, trihydrate
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

- State regulations** : Pennsylvania RTK: lead diacetate, trihydrate: (environmental hazard, generic environmental hazard)
New Jersey: lead diacetate, trihydrate

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
lead diacetate, trihydrate	Yes.	No.	No.	

Canada

- WHMIS (Canada)** : Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Class D-2A: Material causing other toxic effects (Very toxic).
- CEPA DSL/CEPA NDSL** : No products were found.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU regulations

- Risk phrases** : This product is not classified according to EU legislation.

International regulations

- International lists** : Australia (NICNAS): lead diacetate, trihydrate
China: lead diacetate, trihydrate
Germany water class: lead diacetate, trihydrate
Philippines (RA6969): lead diacetate, trihydrate

Section 16. Other Information

- Label requirements** : WARNING!

HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED.
SUSPECT CANCER HAZARD.
MAY CAUSE CANCER.
CAN CAUSE BIRTH DEFECTS. BIRTH DEFECT HAZARD. Cumulative Poison

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

- National Fire Protection Association (U.S.A.)** :
1 **Flammability**
Health 1 0 **Instability**
Special

Notice to reader

The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider

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