



# **Material Safety Data Sheet**

## 1. PRODUCT and COMPANY IDENTIFICATION

**Product: Lead Acetate, Trihydrate** 

Product Codes: NC-7144, CS-L1012, NC-11641, NC-10818 **Synonyms:** Lead (II) Acetate, Trihydrate; Acetic Acid Lead (II) Salt, Trihydrate; Lead Diacetate, Trihydrate; Salt of Saturn

Manufacturer: The Science Company 95 Lincoln St Denver CO 80203

Ph: (303)777-3777 Fax: (303)777-3331

IN CASE OF EMERGENCY 24 HOUR CONTACT TELEPHONE CHEM-TEL: (800)255-3924

All non-emergency questions may be directed to customer service (303)777-3777 or sales@sciencecompany.com

## 2. COMPOSITION and INFORMATION on INGREDIENTS

Chemical Formula % by CAS# **Formula** Weight **Hazardous** <u>Inaredients</u> <u>Weiaht</u> Lead Acetate, Trihydrate 6080-56-4 Pb(CH<sub>3</sub>COO)<sub>2</sub>·3H<sub>2</sub>O 379.33 >99.0% Yes

## 3. HAZARDS IDENTIFICATION

## Emergency Overview:

HARMFUL OR MAY BE FATAL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN. CAUSES IRRITATION OR BURNS TO SKIN, EYES, AND RESPIRATORY TRACT. MAY AFFECT KIDNEYS, LIVER, BLOOD, REPRODUCTIVE SYSTEM, AND/OR CENTRAL NERVOUS SYSTEM. SUSPECT CANCER HAZARD. MAY CAUSE CANCER.

**SAFETY RATINGS:** Reactivity: 1, Slight Health: 3, Severe Flammability: 0, None Contact: 3, Severe

**Protective Equipment:** Chemical Safety Glasses/Goggles, Face Shield, Lab Coat/Apron, Gloves, Vent Hood

Storage Code: Blue: Poison

## Potential Health Effects:

## INHALATION:

Harmful if inhaled. Dust irritating to respiratory tract. Can cause severe central nervous system depression (including unconsciousness).

#### INGESTION:

Harmful if swallowed. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.

Harmful if absorbed through skin. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.

## **EYE CONTACT:**

Causes irritation.

#### POTENTIAL CHRONIC HEALTH EFFECTS:

Suspect cancer hazard - may cause cancer. Can cause adverse reproductive effects - such as birth defects, miscarry ages, or infertility. Suspected of causing genetic defects. Causes central nervous system effects. Can cause kidney damage. Risk of damage to blood system. Can cause lung damage. Lead is accumulated in the body and may cause damage to the brain and nervous system after prolonged exposure.

## MEDICAL CONDITIONS GENERALLY AGGRAVATED by EXPOSURE:

Repeated or prolonged exposure to the substance can produce target organs damage.

## 4. FIRST AID MEASURES

#### INHALATION:

Remove to fresh air. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Get medical attention immediately.

#### INGESTION:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. GET MEDICAL ATTENTION IMMEDIATELY.

## **Lead Acetate Trihvdrate MSDS**

#### SKIN CONTACT:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing and shoes before reuse. Get medical attention immediately.

#### **EYE CONTACT:**

Check for and remove contact lenses. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Effective Date: 12/27/2011

## 5. FIRE FIGHTING MEASURES

NFPA RATINGS: Health: 3 Flammability: 1 Reactivity: 0

FIRE:

May be combustible at high temperatures

**EXPLOSION:** 

Not considered to be an explosion hazard

**FIRE EXTINGUISHING MEDIA:**Dry chemical, foam, or water spray

SPECIAL INFORMATION:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Wear appropriate personal protective equipment as specified in the Exposure Control and Personal Protection Section 8. Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. Do not flush to sewer. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800)424-8802.

## 7. HANDLING and STORAGE

Store in a cool, dry, ventilated area away from heat, sources of ignition, and incompatible materials. Keep containers tightly closed and upright. Protect from physical damage. Containers of this material may be hazardous when empty since they retain product residues (dusts). Do not rinse out container and use it for any other purposes. Observe all warnings and precautions listed for the product. Storage and use areas should be non-smoking. Wash thoroughly after handling.

## 8. EXPOSURE CONTROL and PERSON PROTECTION

## EXPOSURE LIMITS:

-OSHA Permissible Exposure Limit (PEL): 0.05 mg/m³ (TWA)
-ACGIH Threshold Limit Value (TLV): 0.05 mg/m³ (TWA)

**VENTILATION SYSTEM:** 

A system of local and/or general ventilation is recommended to keep employee exposure below airborne limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion into the general work area.

#### PERSONAL RESPIRATORS (NIOSH) APPROVED:

If the exposure limit is exceeded and engineering controls are not feasible, an approved/certified respirator or equivalent must be worn. Respirator should be high-efficiency particulate respirator with full facepiece.

#### SKIN PROTECTION:

Wear protective clothing, gloves, lab coat or apron, face shield, as appropriate, to prevent skin contact.

## **EYE PROTECTION:**

Use chemical safety glasses/goggles and a full face shield. Maintain approved eye wash station in work area.

## 9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE: White crystalline solid
ODOR: Acetic Acid (slight)
SOLUBILITY: Soluble in water

SPECIFIC GRAVITY: 2.55

**pH:** 5.5 - 6.5 (5% solution)

% VOLATILES by VOLUME: Not available

**BOILING POINT:** 100 °C (212 °F) Decomposes

MELTING POINT: 75 °C (167 °F)
VAPOR DENSITY (Air =1): Not available
VAPOR PRESSURE (mm Hg): Not applicable
EVAPORATION RATE (BuAc=1): Not applicable

## 10. STABILITY and REACTIVITY

#### STABILITY:

Stable under ordinary conditions of use and storage

#### HAZARDOUS DECOMPOSITION PRODUCTS:

Lead, carbon dioxide, carbon monoxide

#### **HAZARDOUS POLYMERIZATION:**

Will not occur.

#### **INCOMPATIBILITIES:**

Oxidizing materials, acids, bromates, phenol chloral hydrate, sulfides

**CONDITIONS to AVOID:** 

Heat, flames, ignition sources and incompatibles

## 11. TOXICOLOGICAL INFORMATION

## TOXICOLOGICAL DATA:

Oral Rat LD50: 4665 mg/kg

#### **CHRONIC HEALTH EFFECTS:**

- -May affect genetic material (mutagenic)
- -May cause birth defects (teratogenic)
- -May cause adverse reproductive effects
- -May affect liver, kidneys, blood, nervous system, central nervous system, reproductive system, lungs

#### **CARCINOGENIC EFFECTS:**

-May cause cancer

## 12. ECOLOGICAL INFORMATION

#### **ENVIROMENTAL FATE:**

This product is not readily biodegradable

#### **ENVIROMENTAL TOXICITY:**

This material is expected to be toxic to aquatic life with long lasting effects

## 13. DISPOSAL INFORMATION

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. TRANSPORT INFORMATION

TRANSPORT (Land, DOT):

UN1616, Lead Acetate, 6.1, III

## 15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

U.S. EPA TSCA 8(b) Inventory: Under TSCA, hydrates are considered mixtures of their anhydrous salt and water,

Accordingly, Lead Acetate Anhydrous is subject to TSCA reporting requirements.

#### US EPCRA (SARA Title III) Sections 311/312:

Hazard Categories	List (Yes/No)
Section 311 – Hazardous Chemical	Yes
Immediate Hazard	Yes
Delayed Hazard	Yes
Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No

US EPCRA (SARA Title III) Section 313 – Toxics Release Inventory: Lead Acetate Trihydrate (6080-56-4)

Reportable Threshold: 100 lbs

Effective Date: 12/27/2011

CERCLA (Superfund) Reportable Quantity: Lead Acetate: 10 lbs

## **Lead Acetate Trihvdrate MSDS**

#### **INVENTORY STATUS:**

Country(s) or Region	Inventory Name	On Inventory (Yes/No)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical	No
	Substances (EINECS)	
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

Effective Date: 12/27/2011

## **16. OTHER INFORMATION**

## PRODUCT USE:

For manufacturing, industrial and laboratory use only; not for household use.

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<sup>\*</sup>A "Yes" indicates that the listed component(s) of this product comply with the inventory requirements administered by the governing country(s)