

Revision date: 08-28-2014

# SAFETY DATA SHEET

# 1. Identification

Product identifier: LEAD ACETATE TRIHYDRATE

Other means of identification Product No.: 2271, 5165

Recommended use and restriction on use

Recommended use: Not available. Restrictions on use: Not known.

## Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name: Avantor Performance Materials, Inc. Address: 3477 Corporate Parkway, Suite 200

Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

Fax:

Contact Person: Environmental Health & Safety e-mail: info@avantormaterials.com

**Emergency telephone number:** 

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

# 2. Hazard(s) identification

# Hazard classification

#### **Health hazards**

Acute toxicity (Oral) Category 4
Acute toxicity (Inhalation - dust and Category 4

mist)

Serious eye damage/eye irritation
Germ cell mutagenicity
Category 2
Carcinogenicity
Category 1B
Toxic to reproduction
Category 1A
Specific target organ toxicity - single
Category 1

Specific target organ toxicity -

exposure

Category 1

Specific target organ toxicity - repeated exposure

## **Environmental hazards**

Acute hazards to the aquatic Category 1

environment

Chronic hazards to the aquatic Category 1

environment

#### Label elements

Hazard symbol:



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Signal word: Danger

**Hazard statement:** Harmful if swallowed.

Harmful if inhaled.

Causes serious eye irritation.

Suspected of causing genetic defects.

Causes damage to organs.

Very toxic to aquatic life with long lasting effects.

May cause cancer.

#### **Precautionary statement**

**Prevention:** Wash hands thoroughly after handling. Wear protective gloves/protective

clothing/eye protection/face protection. Obtain special instructions before

use. Do not handle until all safety precautions have been read and

understood. Avoid release to the environment.

Response: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel

unwell. Rinse mouth. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Collect spillage.

Other hazards which do not result in GHS classification:

None.

# 3. Composition/information on ingredients

#### **Substances**

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*		
LEAD ACETATE (HYDRATED FORM)		6080-56-4	100%		

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# 4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

**Ingestion:** Call a physician or poison control center immediately. Rinse mouth. Do not

induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Inhalation:** Move to fresh air. Call a physician or poison control center immediately. If

breathing stops, provide artificial respiration.



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**Skin contact:** Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse.

Destroy or thoroughly clean contaminated shoes.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

**Symptoms:** Irritating to eyes, respiratory system and skin.

Indication of immediate medical attention and special treatment needed

**Treat symptomatically.** Symptoms may be delayed.

5. Fire-fighting measures

**General fire hazards:** In case of fire and/or explosion do not breathe fumes.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

None known.

Specific hazards arising from

the chemical:

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

**Special protective equipment** 

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning

up:

Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or

confined areas. Stop the flow of material, if this is without risk. Inform

authorities if large amounts are involved.

**Environmental precautions:** Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so. Avoid discharge into drains, water courses or onto

the ground.



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# 7. Handling and storage

**Precautions for safe handling:** Use personal protective equipment as required. Do not breathe mist or

vapor. Do not taste or swallow. Do not eat, drink or smoke when using the product. Use only with adequate ventilation. Wash hands thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment. Avoid contact with eyes. Avoid contact with skin. Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood.

Conditions for safe storage,

including any incompatibilities:

Store locked up. Keep in a cool, well-ventilated place. Store in a dry place.

# 8. Exposure controls/personal protection

# **Control parameters**

Occupational exposure limits

Chemical identity	Туре	Exposure Limit values	Source			
LEAD ACETATE (HYDRATED FORM) - as Pb	TWA	0.05 mg/m3	US. ACGIH Threshold Limit Values (2011)			
LEAD ACETATE (HYDRATED FORM)	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (02 2006)			
	OSHA_AC T	0.03 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (02 2006)			
	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (02 2006)			
	OSHA_AC T	0.03 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (02 2006)			
LEAD ACETATE (HYDRATED FORM) - as Pb	TWA	0.05 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)			

**Biological limit values** 

Chemical identity	Exposure Limit values	Source		
LEAD ACETATE (HYDRATED FORM) (Lead:	300 μg/l (Blood)	ACGIH BEL (2011)		
Sampling time: Not critical.)				

# Appropriate engineering controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the

immediate work area.

**Eye/face protection:** Wear safety glasses with side shields (or goggles) and a face shield.

**Skin protection** 

Hand protection: Chemical resistant gloves

Other: Wear suitable protective clothing.

**Respiratory protection:** In case of inadequate ventilation use suitable respirator.



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**Hygiene measures:** Provide eyewash station and safety shower. Observe good industrial

hygiene practices. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using the product.

Wash contaminated clothing before reuse.

## 9. Physical and chemical properties

**Appearance** 

Physical state: Solid

Form: Crystals or powder.

Color: White

Odor: Slight acetic acid odor
Odor threshold: No data available.
pH: 5.5 - 6.5 5% solution

Melting point/freezing point: 75 °C

Initial boiling point and boiling range:

Flash Point:

Evaporation rate:

Flammability (solid, gas):

100 °C Decomposes

Not applicable

No data available.

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

Vapor density:

No data available.

2.55 (20 °C)

Solubility(ies)

Solubility in water: Soluble

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

No data available.

No data available.

No data available.

Other information

**Molecular weight:** 379.33 g/mol (C2H4O2.3/2H2O.1/2Pb)

#### 10. Stability and reactivity

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

**Conditions to avoid:** Excessive heat. Contact with air. Contact with incompatible materials.

**Incompatible materials:** Strong oxidizing agents. Acids.

Hazardous decomposition

products:

Lead and lead oxide. Oxides of Carbon.



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# 11. Toxicological information

Information on likely routes of exposure

**Ingestion:** Harmful if swallowed.

**Inhalation:** Harmful if inhaled.

**Skin contact:** Causes skin irritation.

**Eye contact:** Causes serious eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

**Product:** No data available.

**Dermal** 

**Product:** No data available.

Inhalation

**Product:** No data available.

Repeated dose toxicity

**Product:** No data available.

Skin corrosion/irritation

**Product:** Causes skin irritation.

Serious eye damage/eye irritation

**Product:** Causes serious eye irritation.

Respiratory or skin sensitization

**Product:** Not a skin sensitizer.

Carcinogenicity

**Product:** May cause cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

LEAD ACETATE

Overall evaluation: 2A. Probably carcinogenic to humans. Overall evaluation:

(HYDRATED

FORM)

3. Not classifiable as to carcinogenicity to humans.

#### **US. National Toxicology Program (NTP) Report on Carcinogens:**

LEAD ACETATE Reasonably Anticipated to be a Human Carcinogen.

(HYDRATED FORM)

# US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro

**Product:** Suspected of causing genetic defects.

In vivo

**Product:** Suspected of causing genetic defects.

Reproductive toxicity



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**Product:** May damage fertility or the unborn child.

Specific target organ toxicity - single exposure

**Product:** Blood, Central nervous system., Respiratory tract irritation.

Specific target organ toxicity - repeated exposure

**Product:** Blood, Brain., Respiratory tract irritation., Lung, Central nervous system.

**Aspiration hazard** 

**Product:** Not classified

Other effects: None known.

# 12. Ecological information

# **Ecotoxicity:**

## Acute hazards to the aquatic environment:

Fish

**Product:** No data available.

**Aquatic invertebrates** 

**Product:** No data available.

#### Chronic hazards to the aquatic environment:

Fish

**Product:** No data available.

**Aquatic invertebrates** 

**Product:** No data available.

**Toxicity to Aquatic Plants** 

**Product:** No data available.

#### Persistence and degradability

**Biodegradation** 

**Product:** There are no data on the degradability of this product.

**BOD/COD** ratio

**Product:** No data available.

Bioaccumulative potential

**Bioconcentration factor (BCF)** 

**Product:** No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)
Product:
No data available.

**Mobility in soil:** The product is water soluble and may spread in water systems.

Other adverse effects: Very toxic to aquatic life with long lasting effects.

# 13. Disposal considerations



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**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local

laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and

product characteristics at time of disposal.

Contaminated packaging: Since emptied containers retain product residue, follow label warnings even

after container is emptied.

# 14. Transport information

DOT

UN number: UN 1616 UN proper shipping name: Lead acetate

Transport hazard class(es)

Class(es): 6.1
Label(s): 6.1
Packing group: III
Marine Pollutant: Yes

**IMDG** 

UN number: UN 1616

UN proper shipping name: LEAD ACETATE

Transport hazard class(es)

Class(es): 6.1 Label(s): 6.1 EmS No.: F-A, S-A

Packing group: III
Marine Pollutant: Yes

IATA

UN number: UN 1616
Proper Shipping Name: Lead acetate

Transport hazard class(es):

Class(es): 6.1
Label(s): 6.1
Marine Pollutant: No
Packing group: III

# 15. Regulatory information

# US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

LEAD ACETATE (HYDRATED Reportable quantity: 10 lbs. FORM)

Superfund amendments and reauthorization act of 1986 (SARA)

#### **Hazard categories**

Χ	Acute (Immediate)	Χ	Chronic (Delayed)	Fire	Reactive	Pressure Generating

#### SARA 302 Extremely hazardous substance

None present or none present in regulated quantities.



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SARA 304 Emergency release notification

Chemical identity R

LEAD ACETATE 10 lbs.

(HYDRATED FORM)

SARA 311/312 Hazardous chemical

Chemical identity Threshold Planning Quantity

LEAD ACETATE 500 lbs

(HYDRATED FORM)

**SARA 313 (TRI reporting)** 

Reporting Reporting threshold for threshold for manufacturing and

threshold for manufacturing an Chemical identity other users processing

LEAD ACETATE 100 lbs100 (HYDRATED FORM) lbs100 lbs

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

LEAD ACETATE (HYDRATED Reportable quantity: 10 lbs.

FORM)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

**US state regulations** 

**US. California Proposition 65** 

LEAD ACETATE Carcinogenic.

(HYDRATED FORM)

LEAD ACETATE Carcinogenic.

(HYDRATED FORM)

LEAD ACETATE Male reproductive toxin.

(HYDRATED FORM)

LEAD ACETATE Female reproductive toxin.

(HYDRATED FORM)

LEAD ACETATE Developmental toxin.

(HYDRATED FORM)

US. New Jersey Worker and Community Right-to-Know Act

LEAD ACETATE (HYDRATED Listed

FORM)

**US. Massachusetts RTK - Substance List** 

LEAD ACETATE Listed

(HYDRATED FORM)

US. Pennsylvania RTK - Hazardous Substances

LEAD ACETATE Listed

(HYDRATED FORM)

**US. Rhode Island RTK** 

LEAD ACETATE Listed

(HYDRATED FORM)



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#### **Inventory Status:**

Australia AICS: Canada DSL Inventory List: EINECS, ELINCS or NLP:

Japan (ENCS) List:

China Inv. Existing Chemical Substances: Korea Existing Chemicals Inv. (KECI):

Canada NDSL Inventory: Philippines PICCS: US TSCA Inventory:

New Zealand Inventory of Chemicals:

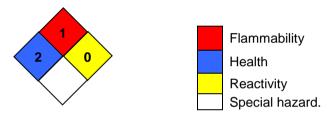
Japan ISHL Listing:

Japan Pharmacopoeia Listing:

On or in compliance with the inventory On or in compliance with the inventory. Not in compliance with the inventory. Not in compliance with the inventory. On or in compliance with the inventory. Not in compliance with the inventory. Not in compliance with the inventory. On or in compliance with the inventory On or in compliance with the inventory On or in compliance with the inventory. Not in compliance with the inventory. Not in compliance with the inventory.

# 16.Other information, including date of preparation or last revision

#### **NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Issue date:** 08-28-2014

**Revision date:** No data available.

Version #: 1.0

Further information: No data available.



Disclaimer:

PERFORMANCE MATERIALS

Version: 1.0

Revision date: 08-28-2014

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