SAFETY DATA SHEET

Preparation Date: 1/30/2018 **Revision Date:** 1/30/2018 **Revision Number:** G1

1. IDENTIFICATION

Product identifier

Product code: L-220
Product Name: LEAD ACETATE, 5 PERCENT (W/V) SOLUTION

Other means of identification
Synonyms: No information available
CAS #: Mixture
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use
Recommended use: No information available.
Uses advised against No information available

Supplier:
Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Carcinogenicity	Category 1B
Reproductive toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Danger

Hazard statements
May cause cancer
May damage fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Not available

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Water	7732-18-5	95
Lead Acetate, Trihydrate	6080-56-4	5

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. If symptoms persist, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation: If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms May cause eye irritation
May cause skin irritation
May cause abdominal pain, nausea, vomiting, diarrhea

May cause loss of appetite
May cause metallic taste
Central nervous system effects
It may affect the kidneys
May affect the liver
A blue line (AKA "lead line") at the gum margin

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: No information available.

Specific hazards: No information available.

Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Absorb spill with inert material (e.g. vermiculite, dry sand or earth). Use appropriate tools to put the spilled material in a suitable chemical waste disposal container.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed. Keep in a well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:
Acids
Bromates
Phenol
choral hydrate
Sulfides

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Water	7732-18-5	None	None	None	None
Lead Acetate, Trihydrate	6080-56-4	None	0.050 mg/m³ TWA Pb	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Lead Acetate, Trihydrate	6080-56-4	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Water	7732-18-5	None	None
Lead Acetate, Trihydrate	6080-56-4	None	None

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles
Skin and body protection:	Chemical resistant apron Gloves Long sleeved clothing
Respiratory protection:	Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Liquid

Appearance:
No information available.

Color:
Colorless.

Odor:
No information available.

Taste
No information available.

Formula:
No information available

Molecular/Formula weight:
No information available

Flammability:
No information available

Flashpoint (°C/°F):
No information available.

Flash Point Tested according to:
Not available

Autoignition Temperature (°C/°F):
No information available

Lower Explosion Limit (%):
No information available

Upper Explosion Limit (%):
No information available

Melting point/range(°C/°F):
No information available

Decomposition temperature(°C/°F):
No information available

Boiling point/range(°C/°F):
The lowest known value is 100°C/212°F (water)

Bulk density:
No information available

Density (g/cm3):
No information available

Specific gravity:
1.03 (weighted average)

pH:
No information available

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
The highest known value is 0.62 (water)

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

Partition coefficient (n-octanol/water):
No information available

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Easily soluble in cold water
Easily soluble in hot water

10. STABILITY AND REACTIVITY

Reactivity
Incompatibility with bromates, phenol, chloral hydrate, sulfides, and acids

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Incompatible materials. Excess Heat.

Incompatible Materials: Acids
Bromates
Phenol
choral hydrate
Sulfides

Hazardous decomposition products: No information available.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Inhalation. Ingestion.

Acute Toxicity

Component Information

Water	
CAS-No.	7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Lead Acetate, Trihydrate	
CAS-No.	6080-56-4

LD50/oral/rat = 4665 mg/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	May cause skin irritation.
Eye Contact:	May cause eye irritation. Lead acetate can produce encrustation of the cornea with direct eye exposure.
Inhalation	May cause respiratory tract irritation (local irritaiton of the bronchia, and lungs). Symptoms suchas metallic taste, chest and abdominal pain may occur. Can be absorbed through the respiratory system, and increased lead blood levels may follow resulting in systemic effects.
Ingestion	May cause gastrointestinal tract irritation with nausea, vomiting, abdominal cramps/tenderness, hypermolity, diarrhea, lead cholic, metallic taste, malaise, loss of appetite/anorexia. It may also affect behavior/central nervous system/nervous system (headache, depression, muscle weakness, irritability, insomnia, dizziness, reduced memory, mood and personality changes, convulsions, somnolence, coma, and death in extreme cases), metabolism (anorexia), liver (liver injury, elevated liver enzymes), kidneys (acute renal tubular injury/renal failure noted by proteininuria, glycosuria, and aminoaciduria), blood (hemolytic anemia).
Aspiration hazard	No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	Skin: May be absorbed through the skin on prolonged exposure and cause systemic effects of chronic lead poisoning. See symptoms of ingestion. Ingestion or Inhalation: It may cause chronic lead poisoning. The hallmarks of chronic lead poisoning are effect on the /central nervous system and peripheral nervous system (anxiety, headache, malaise, fatigue, irritability, forgetfulness, insomnia, lassitude, seizures, motor weakness which may lead to paralysis of the extensor muscles fo the wrist and ankles), anemia, kidney damage (interstitial nephritis, reduced glomerular filtration rate, acute renal failure noted by proteinuria, glycosuria, aminoaciduria). Other symptoms include hypertension or hypotension, metallic taste, abdominal tenderness, colic, constipation, anorexia and weight loss and/or malnutrition, facial pallor, hearing loss, elevated liver enzymes (liver function tests), hyperuricemia (increased uric acid levels)and gout,

and possibly a lead line in the gum margins.

Sensitization: No information available.

Mutagenic Effects: May affect genetic material based on animal test data

Carcinogenic effects: May cause cancer based on animal test data.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Lead Acetate, Trihydrate	6080-56-4	Group 3 - Not Classifiable - Monograph 87 [2006] Supplement 7 [1987] Organolead compounds	Not listed	Reasonably Anticipated To Be A Human Carcinogen	Present	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity May damage fertility or the unborn child

Reproductive Effects: May cause adverse reproductive effects based on animal data
Expected to cross the placenta
Excreted in maternal milk in human

Developmental Effects: No information available

Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target Organs: Blood. Kidneys. Nervous system. Reproductive System. Central nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Lead Acetate, Trihydrate - 6080-56-4

Freshwater Algae Data: 44 mg/l 24 hrs (Algae (Chorococcales(green algae order)))

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Water	7732-18-5	None	None	None	None
Lead Acetate, Trihydrate	6080-56-4	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide Number	No information available
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available

TDG (Canada)

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No Information available
Description:	No information available

ADR

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available

IMO / IMDG

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No information available

RID

UN-No:	Not Regulated
Proper Shipping Name:	No information available

Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
ERG Code: No information available
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Water	7732-18-5	Present	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Lead Acetate, Trihydrate	6080-56-4	Not Listed	Not present	Present	Not present	Present	Present	Not present

U.S. Regulations

Lead Acetate, Trihydrate

New Jersey RTK Hazardous Substance List: sn 2266 (lead compounds)
New Jersey (EHS) List: SN 2266 500 lb TPQ (lead compounds)
New Jersey - Discharge Prevention - List of Hazardous Substances: Present (lead compounds)
Pennsylvania RTK: Environmental hazard (lead compounds)
Pennsylvania RTK - Environmental Hazard List Present (lead compounds)
California Directors List of Hazardous Substances: Present (lead compounds)

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Lead Acetate, Trihydrate	6080-56-4	carcinogen	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis

Water	7732-18-5	None	None	None	None	None
Lead Acetate, Trihydrate	6080-56-4	None	None	None	Lead organic compounds	1.0%

U.S. TSCA

Components	CAS-No.	**TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)**	**TSCA 8(d) -Health and Safety Reporting**
Water	7732-18-5	Not Applicable	Not Applicable
Lead Acetate, Trihydrate	6080-56-4	Not Applicable	Effective 2/28/08, Sunset 4/28/08reporting requirements apply only to manufacturers and importers of consumer products intended for use by children who also manufacture or import Lead or Lead compounds

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification .
Information:

Component
Water
7732-18-5 (95)
Lead Acetate, Trihydrate
6080-56-4 (5)

WHMIS 2015 Hazard Classification
Not a dangerous product according to HPR classification criteria

Carcinogenicity - Category 1B: H350 May cause cancer. (toxicity of Inorganic lead compounds is related to the presence of Pb(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Inorganic lead compounds); Reproductive Toxicity - Category 1: H360 May damage fertility or the unborn child. (toxicity of Inorganic lead compounds is related to the presence of Pb(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Inorganic lead compounds); Specific target organ toxicity - Repeated exposure - Category 1: H372 Causes damage to organs through prolonged or repeated exposure. (toxicity of Inorganic lead compounds is related to the presence of Pb(2+) ion and classification is based on toxicity of this particular ion and accounts for data available for Inorganic lead compounds)

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class
The classification of this product has not been validated yet

Components

Water

WHMIS 1988
Uncontrolled product according to WHMIS classification criteria

Lead Acetate, Trihydrate

D1B,D2A

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Lead Acetate, Trihydrate	6080-56-4	Not Listed	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Lead Acetate, Trihydrate	6080-56-4	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Lead Acetate, Trihydrate	6080-56-4	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Water	7732-18-5	
Lead Acetate, Trihydrate	6080-56-4	Acute toxicity - Oral - Acute Tox. 4: H302 Harmful if swallowed. (Minimum classification, except those specified elsewhere in this Annex); Acute toxicity - Inhalation - Acute Tox. 4: H332 Harmful if inhaled. (Minimum classification, except those specified elsewhere in this Annex); Reproductive Toxicity - Repr. 1A: H360Df May damage the unborn child. Suspected of damaging fertility. (except those specified elsewhere in this Annex); Specific target organ toxicity - Repeated exposure - STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (C >= 0.5 %; Minimum classification; No information to prove exclusion of certain routes of exposure; except those specified elsewhere in this Annex); Hazardous to aquatic environment - acute hazard - Aquatic Acute 1: H400 Very toxic to aquatic life. (except those specified elsewhere in this Annex); Hazardous to aquatic environment - chronic hazard - Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects. (except those specified elsewhere in this Annex)082-001-00-6 Reproductive Toxicity - Repr. 2: H361f Suspected of damaging fertility. (C >= 2.5 %; except those specified elsewhere in this Annex); Specific target organ toxicity - Repeated exposure - STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (C >= 0.5 %; Minimum classification; No information to prove exclusion of certain routes of exposure; except those specified elsewhere in this Annex)082-001-00-6

EU - CLP (1272/2008)

R-phrase(s)
Not determined

S -phrase(s)
not determined

Components	CAS-No.	**Classification**	**Concentration Limits:**	**Safety Phrases**
Water	7732-18-5		No information	
Lead Acetate, Trihydrate	6080-56-4	Xn; R20/22 R33 N; R50-53 Repr.Cat.1; R61 Repr.Cat.3; R62 (lead compounds)	2.5%<=C Repr.Cat.3; R62 1%<=C Xn; R20/22 0.5%<=C R33 (lead compounds)	S: 53-45-60-61 (lead compounds)

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
not determined

16. OTHER INFORMATION

Preparation Date: 1/30/2018
Revision Date: 1/30/2018
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet