Section 1: Product and Company Identification

Product Name: Lead Citrate, Trihydrate
Synonym: Trilead dicitrate

Company Name:
Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477
   Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
   Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day
CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification

2.1 Classification of substance or mixture

GHS Pictograms

GHS08       GHS09       GHS07

GHS Categories:

GHS08 - Health Hazard
   Repr. 1A       H360Df: May damage the unborn child. Suspected of damaging fertility.
   STOT RE 2      H373: May cause damage to organs through prolonged or repeated exposure.

GHS09 - Environment
   Aquatic Acute 1 H400: Very toxic to aquatic life.
   Aquatic Chronic 1 H410: Very toxic to aquatic life with long lasting effects.

GHS07 – Irritant
   Acute Tox. 4    H302: Harmful if swallowed.
   Acute Tox. 4    H332: Harmful if inhaled.

2.2 Label elements

Hazard Pictograms

GHS08       GHS09       GHS07

Signal Word: Danger

Hazard statements
H302+H332   Harmful if swallowed or if inhaled.
H360Df  May damage the unborn child. Suspected of damaging fertility.
H373  May cause damage to organs through prolonged or repeated exposure.
H410  Very toxic to aquatic life with long-lasting effects.

**Precautionary statements**
P260  Do not breathe dust/fume/gas/mist/vapors/spray.
P281  Use personal protective equipment as required.
P301+P312  IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P304+P340  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P405  Store locked up.
P501  Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Label: T; Toxic; Repr. Cat. 1, 3

**Risk phrases:**
R61: May cause harm to the unborn child.
Label: Xn: Harmful
R62-20/22: Possible risk of impaired fertility. Harmful by inhalation and if swallowed.
R33: Danger of cumulative effects.
Label: N; Dangerous for the environment.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:**
Avoid exposure - obtain special instructions before use.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
This material and its container must be disposed of as hazardous waste.
Avoid release to the environment. Refer to special instructions/safety data sheets.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Special labeling of certain preparations:** Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.

**Health Effects:**
NFPA Hazard Rating: Health: 3; Fire: 0; Reactivity: 0
HMIS® Hazard Rating: Health: 2; Fire: 0; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

**Results of PBT and vPvB assessment:**
PBT: Not applicable.
vPvB: Not applicable.

**Emergency overview**
Appearance: Solid
Immediate effects: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**Potential health effects**
Primary Routes of entry: Eyes, ingestion, inhalation, and skin
Signs and Symptoms of Overexposure: ND
Eyes: Irritating to eyes.
Skin: Irritating to skin.
Ingestion: Harmful if swallowed.
Inhalation: Harmful by inhalation.
Chronic Exposure: ND
Chemical Listed As Carcinogen or Potential Carcinogen: No
See Toxicological Information (Section 11)

**Potential environmental effects**
See Ecological Information (Section 12)

### Section 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</th>
<th>%</th>
<th>OSHA PEL mg/m³</th>
<th>ACGIH TLV mg/m³</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trilead dicitrate (512-26-5) EC number: 208-141-1 Index number: 082-001-00-6</td>
<td>ND</td>
<td>NE</td>
<td>NE</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

EPA Registry name: 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, lead(2+) salt (2:3).

### Section 4: First Aid Measures

**If accidental overexposure is suspected**

**General Information:** Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident.

**Eye(s) Contact:** Rinse opened eye for several minutes under running water.

**Skin Contact:** Generally the product does not irritate the skin.

**Inhalation:** Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

**Ingestion:** Immediately call a doctor.

**Note to Physician**

**Treatment:** ND

**Medical Conditions generally Aggravated by Exposure:** ND

### Section 5: Fire Fighting Measures

**Flash Point:** ND

**Flammable Limits:** Product is not flammable.

**Auto-ignition point:** Not determined.

**Fire Extinguishing Media:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special Fire Fighting Procedures:** Mouth respiratory protective device.

**Unusual Fire and Explosion Hazards:** Product does not present an explosion hazard.

**Hazardous combustion products:** ND

**DOT Class:** Toxic

### Section 6: Accidental Release Measures

**Steps to be taken in Case Material is Released or Spilled:**

Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water. Ensure adequate ventilation.

**Waste Disposal Methods:** Dispose of waste according to Federal, State and Local Regulations.
Section 7: Handling and Storage
Precautions to be taken in Handling and Storage: Thorough de-dusting. Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Keep respiratory protective device available. Keep receptacle tightly sealed.
Storage temperature: NA
Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls
Ventilation required: Ensure good ventilation/exhaustion at the workplace.

Personal Protection Equipment
General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.
Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Protective gloves: Wear protective gloves.
Skin protection: ND
Eye protection: Not required.
Additional clothing and/or equipment: ND

Exposure Guidelines
See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties
Appearance and Physical State: Solid, powder.
Odor (threshold): Characteristic (ND)
Specific Gravity (H2O=1): ND
Vapor Pressure (mm Hg): NA
Vapor Density (air=1): NA
Percent Volatile by volume: ND
Evaporation Rate (butyl acetate=1): NA
Boiling Point: ND
Freezing point / melting point: ND
pH: NA
Solubility in Water: ND
Molecular Weight: ND

Section 10: Stability and Reactivity
Stability: No decomposition if used according to specifications.
Conditions to Avoid: ND
Materials to Avoid (Incompatibility): ND
Hazardous Decomposition Products: No dangerous decomposition products known.
Hazardous Polymerization: ND

Section 11: Toxicological Information
Results of component toxicity test performed: ND
Human experience: ND
Primary irritant effect:
On the skin: No irritant effect.
On the eye: No irritating effect.
Sensitization: No sensitizing effects known.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): Repr. 1A
This product does not contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information
Toxicity:
   Aquatic toxicity: ND
Persistence and degradability: ND
Behavior in environmental systems:
   Bioaccumulative potential: ND
   Mobility in soil: ND
   Ecotoxical effects: Very toxic for fish.
Additional ecological information: Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also, poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms.
Chemical Fate Information: ND

Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: ND
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations. Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information
US DOT Information: Proper shipping name: Lead compounds, Soluble, n.o.s. (Lead Citrate, Trihydrate)
   Hazard Class: 6.1
   Packaging group: III
   UN Number: UN2291
   IATA: Proper shipping name: Lead compound, Soluble, n.o.s
   Hazard Class: 6.1
   Packaging group: III
   IMO: Proper shipping name: Lead compounds, Soluble, n.o.s. (Lead Citrate, Trihydrate)
   Hazard Class: 6.1
   UN Number: UN2291
   Packing group: III
   Marine Pollutant: Yes
   Canadian TDG: Lead compounds, soluble, n.o.s. (Lead Citrate, Trihydrate)

Section 15: Regulatory Information
United States Federal Regulations
SARA: Section 355 (extremely hazardous substances): Substance is not listed.
SARA Title III: Section 313 (Specific toxic chemical listings): Substance is not listed.
RCRA: ND
TSCA: Substance is listed.
CERCLA: No
State Regulations
California Proposition 65: Substance Trilead dicitrate (512-26-5) is not listed. Lead and lead compounds are listed. WARNING! This product contains a chemical known to the State of California to cause cancer.
Carcinogenic categories
EPA (Environmental Protection Agency): Substance is not listed.
TLV (Threshold Limit Value established by ACGIH): Substance is not listed.
NIOSH-Ca (National Institute for Occupational Safety and Health): Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed.
A Chemical Safety Assessment has not been carried out

International Regulations
Canada WHMIS: Canadian substance listings:
Canadian Domestic Substances List (DSL): Substance is listed.
Canadian Ingredient Disclosure list (limit 0.1%): Substance is not listed.
Canadian Ingredient Disclosure list (limit 1%): Substance is not listed
Europe EINECS Numbers: 208-141-1

Section 16: Other Information
Label Information: Toxic
European Risk and Safety Phrases: See Section 2.
European symbols needed: Toxic, Harmful, Danger for environment.
Canadian WHMIS Symbols:
D1B - Toxic material causing immediate and serious toxic effects
D2A - Very toxic material causing other toxic effects

Abbreviations used in this document
NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

Disclaimer
Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

SDS Form 0013F1V4