

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 Revision date: 11/19/2013

1. IDENTIFICATION

Product name: Lead Tetraacetate (contains Acetic Acid)

Product code: L0021

Product use: For laboratory research purposes.

Restrictions on use: Not for drug or household use.

Company: TCI America

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Transportation Emergencies:

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Environmental Health Safety and Security

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2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Acute Toxicity - Oral [Category 4]

Acute Toxicity - Inhalation [Category 4] Skin Corrosion/Irritation [Category 2] Germ Cell Mutagenicity [Category 2] Carcinogenicity [Category 1B] Toxic to Reproduction [Category 2]

Specific Target Organ Toxicity (Repeated Exposure) [Category 2]

Oxidizing Liquids [Category 3]

Signal word: Danger!

Hazard Statement(s): Causes skin irritation

Harmful if swallowed Harmful if inhaled May cause cancer May intensify fire; oxidizer

Suspected of causing genetic defects

Suspected of damaging fertility or the unborn child

May cause damage to organs: Blood (System) Nervous System Kidney through prolonged or repeated

exposure.

Pictogram(s) or Symbol(s):







Precautionary Statement(s): [Prevention]

Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Avoid breathing dusts or mists. Use only outdoors or in a well-ventilated area. Wear protective gloves. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection and face protection. Do not breathe dusts or mists. Keep away from heat. Store away from clothing and other combustible materials. Wear protective gloves, eye protection and face protection.

2. HAZARD(S) IDENTIFICATION

[Response]

If swallowed: Immediately call a poison center or doctor. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If exposed: Call a poison center or doctor. If exposed or concerned: Get medical advice or attention. Get medical advice or attention if you feel unwell. In case of fire: Use water spray, wet sand or wet earth to extinguish.

[Storage] Store locked up.

[Disposal] Dispose of contents and container in accordance with US EPA guidelines for the classification and

determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance

Components: Lead Tetraacetate (contains Acetic Acid)

 $\begin{array}{lll} \textbf{Percent:} & >80.0\%(T) \\ \textbf{CAS Number:} & 546-67-8 \\ \textbf{Molecular Weight:} & 443.38 \\ \textbf{Chemical Formula:} & C_8H_{12}O_8Pb \\ \end{array}$

4. FIRST-AID MEASURES

Inhalation: Call emergency medical service. Effects of exposure (inhalation) to substance may be delayed. Inhalation

of vapors or contact with substance will result in contamination and potential harmful effects. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are

aware of the material(s) involved and take precautions to protect themselves.

Skin contact: Call a poison center or doctor if you feel unwell. Effects of exposure (skin contact) to substance may be

delayed. Remove and wash contaminated clothing before re-use. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the

material(s) involved and take precautions to protect themselves.

Eye contact: If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper eyelids. Contact with material may irritate or burn eyes. If eye

irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take

precautions to protect themselves.

Ingestion: Harmful if swallowed. Do not induce vomiting with out medical advice. Effects of exposure (ingestion) to substance may be delayed. Call a physician or Poison Control Center immediately. Do not use mouth-to-

substance may be delayed. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to

protect themselves.

Symptoms/effects:

Delayed:

Acute: Redness.

May cause heritable genetic damage in humans. Possibly carcinogenic to humans.

Immediate medical attention: WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because

the inhaled material is harmful. CAUTION: Victim may be a source of contamination. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use water. Carbon Dioxide (CO₂) provide limited control Consult with local fire authorities before

attempting large scale fire fighting operations.

Unsuitable extinguishing media: Do NOT use dry chemicals or foams.

Specific hazards arising from the chemical

Hazardous combustion products: These products include: Carbon oxides

Other specific hazards: Closed containers may explode from heat of a fire.

5. FIRE-FIGHTING MEASURES

Special precautions for fire-fighters:

Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. These substances will accelerate burning when involved in a fire. May ignite combustibles (wood, paper, oil, clothing, etc.). Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Move containers from fire area if you can do it without risk.

Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use spark-

proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn

unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation.

Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Personal protective equipment: Wear eye protection (splash goggles) and face protection (full length face shield). Verification (splash goggles) and face protection (full length face shield).

Wear eye protection (splash goggles) and face protection (full length face shield). Wear protective clothing (chemical resistant suit and chemical resistant boots). Dust respirator. Be sure to use a MSHA/NIOSH

approved respirator or equivalent. Wear protective gloves (nitrile).

Emergency procedures: Prevent dust cloud. Do not clean-up or dispose except under supervision of a specialist. In case of a spill

and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Keep away from combustible materials, reducing agents, acids, metal powders, light, heat, and sources of ignition. Do not get water inside container Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Ventilate the area. Use clean non-sparking tools to collect absorbed material.

Environmental precautions:

Keep away from living quarters. Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid inhalation of vapor or mist. Manipulate under an adequate fume hood. Do not ingest. Avoid contact

with skin and eyes. Avoid contact - obtain special instructions before use. Avoid prolonged or repeated exposure. Normal measures for preventive fire protection. Avoid exposure - obtain special instructions before use. Avoid contact with combustible material (wood, paper, oil, clothing...). Keep away from heat and sources of ignition. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face

protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.

Conditions for safe storage: Store locked up. Keep containers tightly closed in a cool, well-ventilated place. Keep away from combustible materials. Keep away from sources of ignition. Store and use away from heat, sparks, open

flame, or any other ignition source. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store under inert

gas (e.g. Argon). Moisture sensitive. Store in refrigerator.

Storage incompatibilities: Combustible substances, Reducing Agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No data available

Appropriate engineering controls:

Handle only in a fully enclosed system and equipment. Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment

Respiratory protection: Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Hand protection: Wear protective gloves. Eye protection: Safety glasses.

Skin and body protection: Wear protective clothing (chemical resistant suit and chemical resistant boots).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal - Powder

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: White - Very pale yellow Odor: Acetic acid-like

Odor threshold: No data available

Melting point/freezing point: 180°C (356°F) No data available pH: Boiling point/range: No data available Vapor pressure: No data available Vapor density: **Decomposition temperature:** No data available No data available Relative density: No data available **Dynamic Viscosity:** No data available

Relative density: No data available Kinematic viscosity: No data available

Partition coefficient: No data available Evaporation rate: No data available

n-octanol/water (log P_{ow}) (Butyl Acetate = 1)

Flash point: No data available Autoignition temperature: No data available

Flammability (solid, gas): No data available Flammability or explosive limits:

Lower: No data available
Upper: No data available

Solubility(ies):

Soluble: Alcohols, Benzene, Chloroform, Carbon tetrachloride, Glycerol, Nitrobenzene, Hot acetic acid

10. STABILITY AND REACTIVITY

Reactivity: Not Available.

Chemical Stability: Air sensitive. Heat sensitive. Moisture sensitive. Possibility of Hazardous Reactions: Oxidizing agents may form explosive peroxides.

Conditions to avoid: Air sensitive. Exposure to air. Exposure to moisture. Heat sensitive. Moisture sensitive.

Incompatible materials:
Hazardous Decomposition Products:
Oxidizing agents
No data available

11. TOXICOLOGICAL INFORMATION

RTECS Number: Al5300000

Acute Toxicity: No data available

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

orl-mus TDLo:291.2 g/kg/104W-C

IARC: Group 3 (Not classifiable as NTP: b (Reasonably anticipated to be OSHA: No data available

carcinogenic to humans). carcinogens).

Reproductive toxicity:

No data available

Routes of Exposure: Inhalation, Eye contact, Ingestion, Skin contact.

Symptoms related to exposure:

Overexposure may result in serious illness or death. Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally blistering. Skin contact may result in redness, pain or dry skin.

Potential Health Effects:

Skin and eye contact may result in irritation.

Target organ(s):

May cause damage to organs: Blood (System) Nervous System Kidney through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence and degradability:

Bioaccumulative potential (BCF):

Mobillity in soil:

Partition coefficient:

n-octanol/water (log Pow)

No data available
No data available

Soil adsorption (Koc):

Henry's Law:

No data available
No data available

constant (PaM3/mol)

13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local

rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains,

water ways, or the soil.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division: Subrisk(s): Packing Group:

UN3087 Oxidizing solid, toxic, n.o.s. 5.1 Oxidizer 6.1 Toxic material.

IATA

 UN number:
 Proper Shipping Name:
 Class or Division:
 Subrisk(s):
 Packing Group:

UN3087 Oxidizing solid, toxic, n.o.s. 5.1 Oxidizer 6.1 Toxic material.

IMDG

UN number: Proper Shipping Name: Class or Division: Subrisk(s): Packing Group:

UN3087 Oxidizing solid, toxic, n.o.s. 5.1 Oxidizer 6.1 Toxic material.

EmS number: F-A, S-Q

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed SARA 302: Not Listed

State Regulations

State Right-to-Know

MassachusettsNot ListedNew JerseyNot ListedPennsylvaniaNot ListedCalifornia Proposition 65:Not Listed

Other Information

15. REGULATORY INFORMATION

NFPA Rating: HMIS Classification:

 Health:
 2
 Health:
 2

 Flammability:
 0
 Flammability:
 0

 Instability:
 0
 Physical:
 0

International Inventories

WHMIS hazard class: C: Oxidizing Material.

D2A: Materials causing other toxic effects. (Very Toxic)

D2B: Materials causing other toxic effects. (Toxic)

EC-No: 208-908-0

Notice Through Official Gazettes Reference Number: (Japan)

ENCS: (2)-693

16. OTHER INFORMATION

Revision date: 11/19/2013 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.