Printing date 06/29/2018 Reviewed on 02/19/2018

### 1 Identification

· Product identifier

· Trade name: Leat Tetraacetate (95%)

· Article number: L3600

• CAS Number: 546-67-8 • EC number: 208-908-0

• Index number: 082-001-00-6

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc.

6913 Highway 225 DEER PARK, TX 77536 USA

800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson sherman@aquasolutions.org

· Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666



· Classification of the substance or mixture



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 1A H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H302 Harmful if swallowed. Acute Tox. 4 H332 Harmful if inhaled.

- · Label elements
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

GHS08

- · Signal word Danger
- · Hazard statements

Harmful if swallowed or if inhaled.

(Contd. on page 2)

Printing date 06/29/2018 Reviewed on 02/19/2018

Trade name: Leat Tetraacetate (95%)

(Contd. of page 1)

Suspected of causing cancer.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

*Obtain special instructions before use.* 

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

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

*If swallowed: Call a poison center/doctor if you feel unwell.* 

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = \*2Fire = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

### 3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

546-67-8 lead tetraacetate

- · Identification number(s)
- · EC number: 208-908-0
- · Index number: 082-001-00-6

#### 4 First-aid measures

- · Description of first aid measures
- · General information:

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

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. (Contd. on page 3)

Printing date 06/29/2018 Reviewed on 02/19/2018

Trade name: Leat Tetraacetate (95%)

(Contd. of page 2)

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Immediately call a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

- · Protective Action Criteria for Chemicals
- · PAC-1: Substance is not listed.
- · PAC-2: Substance is not listed.
- · PAC-3: Substance is not listed.

#### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- $\cdot$  *Specific end use*(s) *No further relevant information available.*

US

Printing date 06/29/2018 Reviewed on 02/19/2018

Trade name: Leat Tetraacetate (95%)

(Contd. of page 3)

### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Breathing equipment:

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.

· Protection of hands:



#### Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

### 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Not determined.
Color: Not determined.
Odor: Characteristic
Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

(Contd. on page 5)

Printing date 06/29/2018 Reviewed on 02/19/2018

Trade name: Leat Tetraacetate (95%)

		(Contd. of page
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
· Density:	Not determined.	
· Relative density	Not determined.	
· Vapor density	Not determined.	
Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Not determined.	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Other information	No further relevant information available.	

### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

 Oral
 LD50
 500 mg/kg (ATE)

 Inhalative
 LC50/4h
 11 mg/l (ATE)

- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.

(Contd. on page 6)

Printing date 06/29/2018 Reviewed on 02/19/2018

Trade name: Leat Tetraacetate (95%)

(Contd. of page 5)

- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) R
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

### 12 Ecological information

- · Toxicity
- $\cdot \textbf{\textit{Aquatic toxicity:}} \ \textit{No further relevant information available}.$
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

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.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- · UN-Number
- · DOT, IMDG, IATA UN1616
- · UN proper shipping name
- · DOT Lead acetate· IMDG, IATA LEAD ACETATE
- · Transport hazard class(es)
- $\cdot DOT$



· Class 6.1 Toxic substances

(Contd. on page 7)

Printing date 06/29/2018 Reviewed on 02/19/2018

Trade name: Leat Tetraacetate (95%)

	(Contd. of page
Label	6.1
IMDG, IATA	
Class	6.1 Toxic substances
Label	6.1
Packing group DOT, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Toxic substances
Danger code (Kemler):	60
EMS Number:	6.1-04
Segregation groups	Heavy metals and their salts (including their organometall compounds), lead and its compounds
Stowage Category	A
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	<b>II of</b> Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 100 kg
	On cargo aircraft only: 200 kg
IMDG	
Limited quantities (LQ)	5 kg
Excepted quantities (EQ)	Code: E1
· · · · · · · · · · · · · · · · ·	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1616 LEAD ACETATE, 6.1, III

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is listed.
- · TSCA (Toxic Substances Control Act):

lead tetraacetate

· TSCA new (21st Century Act) (Substances not listed)

CAS: 546-67-8 lead tetraacetate

- · Proposition 65
- · Chemicals known to cause cancer: Substance is listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.

(Contd. on page 8)

Printing date 06/29/2018 Reviewed on 02/19/2018

Trade name: Leat Tetraacetate (95%)

(Contd. of page 7)

- · 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.
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

11307 011300

- · Signal word Danger
- · Hazard statements

Harmful if swallowed or if inhaled.

Suspected of causing cancer.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

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

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact:
- $\cdot \textit{Date of preparation / last revision}$

Revision 0.0, 06-26-2018: Creation date for SDS. STN 06/29/2018 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

(Contd. on page 9)

Printing date 06/29/2018 Reviewed on 02/19/2018

Trade name: Leat Tetraacetate (95%)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4
Carc. 2: Carcinogenicity – Category 2
Repr. 1A: Reproductive toxicity – Category 1A

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

(Contd. of page 8)