

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (4N) 99.99% Lithium Lanthanum Titanate Sputtering Target

**Product Code:** LILA-TAT-04-ST

**CAS Number:** N/A

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

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## SECTION 2. HAZARDS IDENTIFICATION

Signal Word: None

Hazard Statements: None

Precautionary Statements: None

HMIS Health Ratings (0-4):

Health: 1

Flammability: 0

Physical: 0

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family: Ceramic

Additional Names: Lithium lanthanum titanium oxide

Lithium lanthanum titanate (LiLaTiO<sub>3</sub>):

Percentage: 100 wt%

CAS#: None

EC #: None

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## **SECTION 4. FIRST AID MEASURES**

General Treatment:

Seek medical attention if symptoms persist.

Special Treatment: None

Important Symptoms: None

Inhalation:

Remove victim to fresh air. Supply oxygen if breathing is difficult.

Ingestion:

Give one to two glasses of water and induce vomiting.

Never induce vomiting or give anything by mouth to an unconscious person.

Skin:

Wash affected area with mild soap and water. Remove any contaminated clothing.

Eyes:

Flush eyes with water, blinking often for several minutes.

Remove contact lenses if present and easy to do. Continue rinsing

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## **SECTION 5. FIREFIGHTING MEASURES**

Flammability: Non-flammable

Extinguishing Media:

No special restrictions –use suitable extinguishing agent for surrounding material and type of fire.

Spec. Fire Fighting Procedure:

Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes.

See section 10 for decomposition products.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

If Material Is Released/Spilled:

Wear appropriate respiratory and protective equipment specified in special protection information.

Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal.

Take care not to raise dust.

Environmental Precautions:

Isolate runoff to prevent environmental pollution.

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## **SECTION 7. HANDLING AND STORAGE**

Handling Conditions:

Wash thoroughly after handling.

Storage Conditions:

Store in a cool dry place in a tightly sealed container.

Store apart from materials and conditions listed in section 10.

Work/Hygienic

Maintenance:

Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Ventilation:

Provide sufficient ventilation to maintain concentration at or below threshold limit.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Permissible Exposure Limits: None

Threshold Limit Value: None

Special Equipment: None

Respiratory Protection: Dust Respirator

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses or goggles

Body Protection: Protective work clothing. Wear close-toed shoes and long sleeves/pants.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Dark grey

Form:

Powder, Granules, Pellets, Sputtering target, Custom parts

Odor: Odorless

Water Solubility: Insoluble

Boiling Point: N/A

Melting Point: N/A

Flash Point: N/A

Autoignition Temperature: N/A

Density: N/A

Molecular weight: N/A

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## SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions

Reacts With: Oxidizing agents

Incompatible Conditions: None

HazardousDecomposition Products: Metal oxide fume

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## SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: May cause serious irritation

Skin: May cause irritation

Ingestion: Harmful

Inhalation: May cause irritation

Chronic:

Large amounts of lithium compounds may cause vomiting, diarrhea, ataxia, intestinal irritation, kidney injury, central nervous system depression and a drop in blood pressure.

Central nervous system effects may include slurred speech, blurred vision, dizziness, sensory loss, convulsions and stupor.

Chronic intake may cause neuromuscular effects such as tremor, ataxia, weakness, clonus and hyperactive reflexes.

Lithium can cause kidney damage, gastrointestinal disturbances, fatigue, dehydration, weight loss, dermatological effects and thyroid damage. Lithium ion has shown teratogenic effects in rats and mice.

Signs & Symptoms: N/A

Aggravated Medical Conditions: N/A  
Median Lethal Dose: N/A  
Carcinogen: N/A

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## **SECTION 12. ECOLOGICAL INFORMATION**

Aquatic Toxicity: Low  
Persistent Bioaccumulation Toxicity: No  
Very Persistent, Very Bioaccumulative: No  
Notes: N/A

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local, state, national, and international regulations.

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## **SECTION 14. TRANSPORT INFORMATION**

Hazardous: Not hazardous for transportation.  
Hazard Class: N/A  
Packing Group: N/A  
UN Number: N/A  
Proper Shipping Name: N/A

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## **SECTION 15. REGULATORY INFORMATION**

Sec 302 Extremely Hazardous: No  
Sec 304 Reportable Quantities: N/A  
Sec 313 Toxic Chemicals: No

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## **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.