

# SAFETY DATA SHEET

Date Printed: 05/10/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Lithium Hexafluoroaluminate Sputtering Target

**Product Code:** LI-FALO-05-ST

**CAS Number:** 13821-20-0

**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

## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Acute toxicity - Inhalation, Category 4

Reproductive toxicity, Additional category for effects on or via lactation

Specific target organ toxicity – repeated exposure, Category 1

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 2

GHS label elements, including precautionary statements



Signal word

Danger

Hazard statement(s)

H332 Harmful if inhaled

H362 May cause harm to breast-fed children

H372 Causes damage to organs through prolonged or repeated exposure

H411 Toxic to aquatic life with long lasting effects

Precautionary statement(s)

Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P263 Avoid contact during pregnancy and while nursing.  
P264 Wash ... thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.

#### Response

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 Call a POISON CENTER/doctor/...if you feel unwell.  
P308+P313 IF exposed or concerned: Get medical advice/ attention.  
P314 Get medical advice/attention if you feel unwell.  
P391 Collect spillage.

#### Storage

none

#### Disposal

P501 Dispose of contents/container to ...

Other hazards which do not result in classification

none

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

Chemical name-trilithium hexafluoroaluminate

Common names and synonyms-trilithium hexafluoroaluminate

CAS number-13821-20-0

EC number- none

Concentration- 100%

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## SECTION 4. FIRST AID MEASURES

#### Description of necessary first-aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

##### Most important symptoms/effects, acute and delayed

no data available

##### Indication of immediate medical attention and special treatment needed, if necessary

no data available

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## SECTION 5. FIREFIGHTING MEASURES

#### Extinguishing media

Suitable extinguishing media  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Specific hazards arising from the chemical  
no data available  
Special protective actions for fire-fighters  
Wear self-contained breathing apparatus for firefighting if necessary.

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

Personal precautions, protective equipment and emergency procedures  
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas.  
Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.  
Environmental precautions  
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.  
Methods and materials for containment and cleaning up  
Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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

Precautions for safe handling  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed.  
For precautions see section 2.2.  
Conditions for safe storage, including any incompatibilities  
Store in cool place. Keep container tightly closed in a dry and well-ventilated place

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters  
Occupational Exposure limit values  
no data available  
Biological limit values  
no data available  
Appropriate engineering controls  
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.  
Individual protection measures, such as personal protective equipment (PPE)  
Eye/face protection  
Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Skin protection  
Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection  
Wear dust mask when handling large quantities.  
Thermal hazards  
no data available

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state white powder  
Colour no data available  
Odour no data available  
Melting point/ freezing point 790 °C  
Boiling point or initial boiling point and boiling range no data available  
Flammability no data available  
Lower and upper explosion limit / flammability limit no data available  
Flash point no data available  
Auto-ignition temperature no data available  
Decomposition temperature no data available  
pH no data available  
Kinematic viscosity no data available  
Solubility no data available  
Partition coefficient n-octanol/water (log value) no data available  
Vapour pressure no data available  
Density and/or relative density no data available  
Relative vapour density no data available  
Particle characteristics no data available

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## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity  
no data available  
Chemical stability  
Stable under recommended storage conditions.  
Possibility of hazardous reactions  
no data available  
Conditions to avoid  
no data available  
Incompatible materials  
no data available  
Hazardous decomposition products  
no data available

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Acute toxicity  
Oral: no data available  
Inhalation: no data available  
Dermal: 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  
no data available  
Reproductive toxicity  
no data available  
STOT-single exposure  
no data available  
STOT-repeated exposure  
no data available  
Aspiration hazard  
no data available

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## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity  
Toxicity to fish: no data available  
Toxicity to daphnia and other aquatic invertebrates: no data available  
Toxicity to algae: no data available  
Toxicity to microorganisms: no data available  
Persistence and degradability  
no data available  
Bioaccumulative potential  
no data available  
Mobility in soil  
no data available  
Other adverse effects  
no data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods  
Product  
The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.  
Contaminated packaging  
Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## **SECTION 14. TRANSPORT INFORMATION**

UN Number  
ADR/RID: no data available IMDG: no data available IATA: no data available  
UN Proper Shipping Name

ADR/RID: no data available  
IMDG: no data available  
IATA: no data available  
Transport hazard class(es)  
ADR/RID: no data available IMDG: no data available IATA: no data available  
Packing group, if applicable  
ADR/RID: no data available IMDG: no data available IATA: no data available  
Environmental hazards  
ADR/RID: yes IMDG: yes IATA: yes  
Special precautions for user  
no data available  
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
no data available

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## SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question  
Chemical name Common names and synonyms CAS number EC number  
trilithium hexafluoroaluminate trilithium hexafluoroaluminate 13821-20-0 none  
European Inventory of Existing Commercial Chemical Substances (EINECS) Listed.  
EC Inventory Listed.  
United States Toxic Substances Control Act (TSCA) Inventory Listed.  
China Catalog of Hazardous chemicals 2015 Not Listed.  
New Zealand Inventory of Chemicals (NZIoC) Listed.  
Philippines Inventory of Chemicals and Chemical Substances (PICCS) Not Listed.  
Vietnam National Chemical Inventory Not Listed.  
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC) Not Listed.

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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.