SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name / Description: Lithium Aluminum Titanium Phosphate (LATP) powder
CAS Number: 120479-61-0

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses: Solid electrolyte material; Laboratory chemicals; Synthesis of substances; R&D

1.3 Details of the Supplier of the Safety Data Sheet

Company: NEI Corporation
Address: 400 Apgar Drive, Unit E – Somerset, NJ 08873 – USA
Phone: +1 (732) 868-3141
Fax: +1 (732) 868-3143
Email: productinfo@neicorporation.com

1.4 Emergency Telephone Number

Manufacturer: +1 (732) 868-3142 (9am to 6pm EST / UTC -0500)
U.S. Poison Control Center: +1-800-222-1222

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

2.2 GHS Label Elements (including precautionary statements)

The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

2.4 Additional Information

While this product & its components are not classified as hazardous, this MSDS contains valuable information critical to the safe handling and proper use of this product. This MSDS should be retained and available for employees and other users of this product.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Formula: Li$_{1.4}$Al$_{0.4}$Ti$_{1.6}$(PO$_4$)$_3$
Synonyms: LATP

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS #</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium Aluminum Titanium Phosphate</td>
<td>120479-61-0</td>
<td>100%</td>
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</tbody>
</table>

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice:
Move out of exposed area. Seek medical attention of irritation occurs. Show this SDS to the doctor in attendance.

After Inhalation:
If breathed in, move person into fresh air. If not breathing, give artificial respiration and seek medical attention.

After Skin Contact:
Wash off with soap and plenty of water.

After Eye Contact:
Rinse thoroughly with plenty of water as a precaution. Seek medical attention if irritation occurs.
After Swallowing:
Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed
No Data Available

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2 Hazardous Combustion Products
Oxides of phosphorus, Titanium/titanium oxides, Lithium oxides, Aluminum oxide

5.3 Advice for Firefighters
Wear self-contained breathing apparatus for firefighting if necessary

5.4 Other Information
No Data Available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and Materials for Containment and Cleaning Up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in closed containers for disposal.

6.4 Reference to Other Sections
For safe handling, see Section 7; for personal protection, see Section 8; for disposal, see Section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling
Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Appropriate personal protective equipment should be used at all times. For precautions see Section 2.2

7.2 Conditions for Safe Storage (including any incompatibilities)
Keep container tightly closed in a dry, well-ventilated place. Avoid contamination with incompatible materials (Section 10.5)

7.3 Specific End Uses
A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters
Contains no substances with occupational exposure limit values.

8.2 Exposure Controls
Appropriate Engineering Controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Keep away from food and beverages.

Personal Protective Equipment
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:
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.

Body Protection:
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the
specific work-place. The type of protective equipment must be selected according to the concentration and amount
of the dangerous substance at the specific workplace.

Respiratory Protection:
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US)
or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government
standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure
Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Form: Solid (powder)
Color: White
Odor: Odorless
pH: No Data Available
Melting point/range: No Data Available
Specific Gravity: No Data Available
Density (20 °C): No Data Available
Viscosity (20 °C): No Data Available
Boiling Point: No Data Available
Flashpoint: No Data Available
Ignition Temperature: No Data Available
Auto-ignition Temperature: No Data Available
Lower Explosion Limit: No Data Available
Upper Explosion Limit: No Data Available
Vapor Pressure: No Data Available
Vapor Density: No Data Available
Water Solubility: No Data Available
Evaporation Rate: No Data Available

9.2 Other Information
No Data Available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
No Data Available

10.2 Chemical Stability
Stable under recommended storage conditions (see Section 7.2)

10.3 Possibility of Hazardous Reactions
No Data Available

10.4 Conditions to Avoid
No Data Available
10.5 Incompatible Materials
Strong acids

10.6 Hazardous Decomposition Products
In the Event of Fire: See Section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute Toxicity
- Oral LD50: No Data Available
- Inhalation LC50: No Data Available
- Dermal LD50: No Data Available
- Other Information: No Data Available

Skin corrosion/irritation
No Data Available

Serious eye damage/eye irritation
No Data Available

Respiratory or skin sensitization
No Data Available

Germ cell mutagenicity
No Data Available

Carcinogenicity
- IARC: No component of this product (present at levels greater than or equal to 0.1%) is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product (present at levels greater than or equal to 0.1%) is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product (present at levels greater than or equal to 0.1%) is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product (present at levels greater than or equal to 0.1%) is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity
No Data Available

Teratogenicity
No Data Available

Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System)
No Data Available

Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System)
No Data Available

Aspiration Hazard
No Data Available

Additional Information
RTECS: Not available
To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
No Data Available
12.2 Persistence and Degradability  
No Data Available

12.3 Bioaccumulative Potential  
No Data Available

12.4 Mobility in Soil  
No Data Available

12.5 Results of PBT and vPvB Assessment  
PBT/vPvB assessment not available as chemical safety assessment not conducted / required.

12.6 Other Adverse Effects  
The toxicological properties of this material have not been fully investigated.

SECTION 13: DISPOSAL CONSIDERATIONS  
13.1 Waste Treatment Methods – Product  
Offer surplus and non-recyclable solutions to a licensed disposal company.

13.2 Waste Treatment Methods – Contaminated Packaging  
Dispose of properly as you would with unused product.

SECTION 14: TRANSPORT INFORMATION  
14.1 Department of Transportation (DOT - US)  
Not dangerous goods

14.2 International Maritime Dangerous Goods (IMDG)  
Not dangerous goods

14.3 International Air Transport Association (IATA)  
Not dangerous goods

14.4 Additional Transport Information  
HST Code / Schedule B #: 2853.00.0065

SECTION 15: REGULATORY INFORMATION  
15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture  
OSHA HAZARDS  
No known OSHA hazards

SARA 302 Components  
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards  
No SARA Hazards

SARA 313 Components  
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CALIFORNIA PROPOSITION 65  
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Right to Know Components

<table>
<thead>
<tr>
<th>Component</th>
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<th>List Citations</th>
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<tr>
<td>Lithium aluminum titanium phosphate</td>
<td>120479-61-0</td>
<td>NJ &amp; PA Right to Know</td>
</tr>
</tbody>
</table>

15.2 Chemical Safety Assessment  
A chemical safety assessment was not carried out for this product.
SECTION 16: OTHER INFORMATION

REACH Number
A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

HMIS Classification           NFPA Rating
  Health Hazard: 0             Health Hazard: 0
  Flammability Hazard: 0       Flammability Hazard: 0
  Physical Hazard: 0           Reactivity Hazard: 0

Further Information
NEI has attempted to provide current and accurate information to the best of its knowledge. NEI makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, injury of any kind which may result from or arise out of the use of or reliance on the information by any person. Employers should use this information only as a supplement to other information gathered by them and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

- END OF SDS -