



LTS Research Laboratories, Inc.
Safety Data Sheet
Lithium nitride

1. Product and Company Identification

Trade Name:	Lithium nitride
Chemical Formula:	Li_3N
Recommended Use:	Scientific research and development
Manufacturer/Supplier:	LTS Research Laboratories, Inc.
Street:	37 Ramland Road
City:	Orangeburg
State:	New York
Zip Code:	10962
Country:	USA
Tel #:	855-587-2436 / 855-lts-chem
24-Hour Emergency Contact:	800-424-9300 (US & Canada) +1-703-527-3887 (International)



2. Hazards Identification

Signal Word:

Danger



Hazard Statements:

H260: In contact with water releases flammable gases which may ignite spontaneously.

H314: Causes severe skin burns and eye damage.

Precautionary Statements:

P223: Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231+P232: Handle under inert gas. Protect from moisture.

P260: Do not breathe dust/fume/gas/mist/vapors/spray

P264: Wash skin thoroughly after handling.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304+P340+P310: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P335+P334: Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.

P363: Wash contaminated clothing before reuse.

P370+P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P402+P404: Store in a dry place. Store in a closed container.

P405: Store locked up

P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health: 3

Flammability: 4

Physical: 3

3. Composition

Chemical Family: Ceramic

Additional Names: N/A

Lithium nitride (Li₃N):

Percentage: 100 wt%

CAS #: 26134-62-3

EC #: 247-475-2

4. First Aid Procedures

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. Keep patient warm. Seek immediate medical attention.
Ingestion:	Seek immediate medical attention.
Skin:	Immediately wash affected area with mild soap and water. Remove any contaminated clothing. Seek immediate medical attention.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek immediate medical attention.

5. Firefighting Measures

Flammability:	Flammable
Extinguishing Media:	Do not use water for fires – use CO ₂ , sand, extinguishing powder.
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.

6. Accidental Release Measures

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Keep unprotected persons away. Isolate spill area and provide ventilation. Use neutralizing agent. 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.

7. Handling and Storage

Handling Conditions:	Handle under dry protective gas. Avoid contact with skin and eyes. Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store away from water/moisture, strong bases, oxidizing agents. Store under dry inert gas. This product is moisture sensitive. Keep away from sources of ignition. Protect from humidity and water. 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.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Respiratory Protection:	Dust Respirator
Protective Gloves:	Nitrile rubber gloves with minimum thickness of 0.11 mm
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	Red to brown
Form:	Powder
Odor:	Ammonia-like
Water Solubility:	Contact with water liberates extremely flammable gases.
Boiling Point:	N/A
Melting Point:	845 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	1.3 g/cc
Molecular weight:	34.83 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions. Reacts violently with water. Contact with water liberates extremely flammable gases
Reacts With:	Oxidizing agents, water/moisture, copper, carbon tetrachloride, bases, silicon tetrafluoride. Contact with acids releases toxic gases.
Incompatible Conditions:	Water/moisture
Hazardous Decomposition Products:	Metal oxide fume, nitrogen oxides, lithium oxides

11. Toxicological Information

Potential Health Effects:	
Eyes:	Causes serious eye damage.
Skin:	Causes severe skin burns.
Ingestion:	Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.
Inhalation:	May cause irritation
Chronic:	N/A
Signs & Symptoms:	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Spasm, inflammation and edema of the larynx. Spasm, inflammation and edema of the bronchi. Pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	N/A
Carcinogen:	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.

12. Ecological Information

Aquatic Toxicity:	N/A
Persistent Bioaccumulation Toxicity:	N/A
Very Persistent, Very Bioaccumulative:	N/A
Notes:	Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment.

13. Disposal Considerations

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

14. Transportation Data

Hazardous:	Hazardous for transportation
------------	------------------------------



Hazard Class:	4.3 Substances which, in contact with water, emit flammable gases
Packing Group:	I
UN Number:	UN2806
Proper Shipping Name:	Lithium nitride

15. Regulatory Information

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

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

Document Last Revised: 06/27/2019