



Material Safety Data Sheet Lithium nitrate

Section 1 - Chemical Product and Company Identification

MSDS Name:

Lithium Nitrate

Catalog Numbers:

LC16250

Synonyms:

Nitric acid, lithium salt.

Company Identification:

LabChem Inc

200 William Pitt Way

Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7790-69-4	Lithium nitrate	100

Section 3 - Hazards Identification

Emergency Overview

Appearance: White solid.**Danger!** Strong oxidizer. Contact with other material may cause a fire. Causes eye, skin, and respiratory tract irritation. May cause central nervous system effects. May cause cardiac disturbances. May cause kidney damage. May cause methemoglobinemia. Hygroscopic (absorbs moisture from the air).**Target Organs:** Blood, kidneys, central nervous system, cardiovascular system.

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

Causes skin irritation.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause muscle tremor and impaired motor function. May cause circulatory system failure. May cause cardiac disturbances. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. Methemoglobinemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of skin due to deficient



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oxygenation of the blood), rapid heart rate and chocolate-brown colored blood. May cause tremors and convulsions.

Inhalation:

Causes respiratory tract irritation. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, tachycardia, dyspnea (labored breathing), and death.

Chronic:

Chronic ingestion may cause dizziness, ringing in the ears, visual disturbances, tremors, and mental confusion. Prolonged absorption may affect electrolyte balance and impair kidney function. Dehydration, weight loss, skin effects, and thyroid disturbances have been reported.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with other material may cause fire.

Extinguishing Media:

Use water only! Do NOT use carbon dioxide. Do NOT use dry chemical.

Autoignition Temperature:

Not available.

Flash Point:

Not available.

NFPA Rating:

(estimated) Health: 2; Flammability: 0; Instability: 1; Special Hazard: OX

Explosion Limits:

Lower: n/a Upper: n/a



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal.

Avoid generating dusty conditions. Provide ventilation. Keep combustibles (wood, paper, oil, etc.,) away from spilled material.

Section 7 - Handling and Storage

Handling:

Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not ingest or inhale. Keep from contact with clothing and other combustible materials. Discard contaminated shoes. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Lithium nitrate	none listed	none listed	none listed

OSHA Vacated PELs:

Lithium nitrate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.



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Section 9 - Physical and Chemical Properties

Physical State:	Solid
Color:	White
Odor:	Not available
pH:	Not available
Vapor Pressure:	Not available
Vapor Density:	2.4
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	600°C @ 760 mmHg
Freezing/Melting Point:	251°C
Decomposition Temperature:	> 600°C
Solubility in water:	90 g/L (28°C)
Specific Gravity/Density:	2.3800 g/cm ³
Molecular Formula:	LiNO ₃
Molecular Weight:	68.95

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Dust generation, moisture.

Incompatibilities with Other Materials:

Combustible materials.

Hazardous Decomposition Products:

Nitrogen oxides, lithium oxide.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7790-69-4 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 7790-69-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

No information found



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Neurotoxicity:

No information found

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Lithium nitrate

Hazard Class: 5.1

UN Number: UN2722

Packing Group: III

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 7790-69-4 is listed on the TSCA inventory.

SARA Reportable Quantities (RQ):

None of the chemicals in this material have an RQ.

CERCLA/SARA Section 313:

This material contains Lithium nitrate (listed as Water Dissociable Nitrate Compounds), 100%, (CAS# 7790-69-4) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

US State

State Right to Know:

CAS# 7790-69-4 can be found on the following state right to know lists: New Jersey.

California Regulations:

None.

European/International Regulations

Canadian DSL/NDL:

CAS# 7790-69-4 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7790-69-4 is not listed on the Canadian Ingredient Disclosure List.



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Section 16 - Other Information

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