

# SAFETY DATA SHEET

Date Printed: 04/17/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Lithium Nitrate Solution

**Product Code:** LI-NAT-05-SOL

**CAS Number:** 7790-69-4

**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

WARNING!

Strong oxidizing agent and body tissue irritant

Target organs: Blood, kidneys and central nervous system.

This material is considered hazardous by the OSHA

Hazard Communication Standard (29 CFR 1910.1200).



GHS03 GHS07

Signal word: Danger

Hazard statements

H272 May intensify fire; oxidizer.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

P221 Take any precaution to avoid mixing with combustibles.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220 Keep/Store away from clothing/combustible materials.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.  
WHMIS classification  
C - Oxidizing materials  
D2B - Toxic material causing other toxic effects  
Classification system  
HMIS ratings (scale 0-4)  
(Hazardous Materials Identification System)  
Health (acute effects) = 1  
Flammability = 0  
Physical Hazard = 2  
Other hazards  
Results of PBT and vPvB assessment:  
PBT: N/A.  
vPvB: N/A.

---

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Lithium Nitrate (7790-69-4)  
Water (7732-18-5)

---

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

Always seek professional medical attention after first aid measures are provided.  
Eyes:  
Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.  
Skin:  
Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.  
Ingestion:  
Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink. Induce vomiting immediately.  
Inhalation:  
Remove to fresh air. If not breathing, give artificial respiration.

---

### **SECTION 5. FIREFIGHTING MEASURES**

Oxidizer agent, Noncombustible solution. When heated to decomposition, emits acrid fumes.  
Protective equipment and precautions for firefighters:  
Use foam or dry chemical to extinguish fire.  
Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

---

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

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Contain spill with sand or absorbent material and place in

sealed bag or container for disposal. Ventilate and wash spill area after pickup is complete. See Section 13 for disposal information.

---

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

### Handling:

Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.

### Storage:

Store in Oxidizer Storage Area [Yellow Storage] with other oxidizers and away from any combustible materials. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

---

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

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Use NIOSH-approved respirator with a dust cartridge.  
Exposure guidelines: Lithium Nitrate: OSHA PELN/A, ACGIH: TLV: N/A, STEL: N/A.

---

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

Molecular formula :

LiNO<sub>3</sub>.

Appearance:

Clear, colorless liquid.

Molecular weight :

68.95.

Odor

No Odor.

Specific Gravity :

1.18 g/mL @ 20°C.

Odor Threshold :

N/A.

Vapor Density (air=1) :

N/A.

Solubility:

Soluble in water and alcohol.

Melting Point :

N/A.

Evaporation rate:

N/A.

(Butyl acetate = 1).

Boiling Point/Range :

N/A.

Partition Coefficient:

N/A.

(log POW).

Vapor Pressure (20°C) :

N/A.

pH:  
N/A.  
Flash Point:  
N/A.  
LEL :  
N/A.  
Autoignition Temp.:  
N/A.  
UEL :  
N/A.

---

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

Avoid heat and ignition sources.

Stability:

Stable under normal conditions of use and storage.

Incompatibility:

May react or be incompatible with organic materials, combustible materials, strong oxidizing agents, strong acids or powdered metals.

Shelf life:

Indefinite is stored properly.

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Acute Symptoms/Signs of exposure:

Eyes:

Redness, tearing, itching, burning, conjunctivitis.

Skin:

Redness, itching.

Ingestion:

Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain.

Inhalation:

Irritation of mucous membranes, coughing, wheezing, shortness of breath

Chronic Effects:

No information found.

Sensitization:

none expected

Lithium Nitrate: LD50 [oral, rat]; N/A; LC

50 [rat]; N/A; LD50 Dermal [rabbit]; N/A

Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

---

## **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity (aquatic and terrestrial):

Ecological impact has not been determined.

---

## SECTION 13. DISPOSAL CONSIDERATIONS

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Use a licensed chemical waste disposal firm for proper disposal.

---

## SECTION 14. TRANSPORT INFORMATION

DOT Shipping Name:  
Lithium Nitrate Solution.  
Canada TDG:  
Lithium Nitrate Solution.  
DOT Hazard Class:  
5.1, pg III.  
Hazard Class:  
5.1, pg III.  
Identification Number:  
UN2722.  
UN Number:  
UN2722.

---

## SECTION 15. REGULATORY INFORMATION

EINECS:  
Listed (232-218-9) .  
WHMIS Canada:  
CLASS C: Oxidizing material .  
TSCA:  
All components are listed or are exempt.  
California Proposition 65:  
Not listed.  
The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

---

## 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.

---