

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/15/2024

Reviewed on 05/15/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Lithium Nitrate, Reagent Grade Granular
- **Article number:** L5222
- **CAS Number:**  
7790-69-4
- **EC number:**  
232-218-9
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Aqua Solutions, Inc.  
6913 Highway 225  
DEER PARK, TX 77536  
USA  
800-256-2586
- **Information department:**  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS03 Flame over circle

Oxidizing Liquids 3 H272 May intensify fire; oxidizer.

Oxidizing Solids 3 H272 May intensify fire; oxidizer.

- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS03

- **Signal word** Warning
- **Hazard statements**  
May intensify fire; oxidizer.  
May intensify fire; oxidizer.
- **Precautionary statements**  
Keep away from heat.  
Keep/Store away from clothing/combustible materials.  
Take any precaution to avoid mixing with combustibles.  
Wear protective gloves/protective clothing/eye protection/face protection.  
In case of fire: Use CO2, powder or water spray to extinguish.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

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Trade name: **Lithium Nitrate, Reagent Grade Granular**

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 3  
Reactivity = 0

The substance possesses oxidizing properties.

- **HMIS-ratings (scale 0 - 4)**



Health = 0  
Fire = 3  
Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**  
CAS: 7790-69-4 Lithium Nitrate
- **Identification number(s)**
- **EC number:** 232-218-9

## 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.

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- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**
  - **PAC-1:** 30 mg/m<sup>3</sup>
  - **PAC-2:** 330 mg/m<sup>3</sup>
  - **PAC-3:** 2,000 mg/m<sup>3</sup>

### 7 Handling and storage

- **Handling:**
  - **Precautions for safe handling** No special precautions are necessary if used correctly.
  - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** No special requirements.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** None.
  - **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:** Not required.
  - **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
    - **Breathing equipment:** Not required.
  - **Protection of hands:**
    - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
    - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - **Material of gloves**
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
  - **Penetration time of glove material**
    - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:** Not required.
  - **Body protection:** Protective work clothing

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## 9 Physical and chemical properties

<ul style="list-style-type: none"> <li>· <b>Information on basic physical and chemical properties</b></li> <li>· <b>General Information</b></li> <li>· <b>Appearance:</b> <ul style="list-style-type: none"> <li>Form: Granulate</li> <li>Color: Colorless</li> </ul> </li> <li>· <b>Odor:</b> Odorless</li> <li>· <b>Odor threshold:</b> Not determined.</li> </ul>	
· <b>pH-value:</b>	Not applicable.
<ul style="list-style-type: none"> <li>· <b>Change in condition</b> <ul style="list-style-type: none"> <li>Melting point/Melting range: 264 °C (507.2 °F)</li> <li>Boiling point/Boiling range: Undetermined.</li> </ul> </li> <li>· <b>Flash point:</b> Not applicable.</li> <li>· <b>Flammability (solid, gaseous):</b> Product is not flammable.</li> <li>· <b>Decomposition temperature:</b> Not determined.</li> <li>· <b>Ignition temperature:</b> Not determined.</li> <li>· <b>Danger of explosion:</b> Product does not present an explosion hazard.</li> <li>· <b>Explosion limits:</b> <ul style="list-style-type: none"> <li>Lower: Not determined.</li> <li>Upper: Not determined.</li> </ul> </li> <li>· <b>Vapor pressure:</b> Not applicable.</li> <li>· <b>Density at 20 °C (68 °F):</b> 2.38 g/cm<sup>3</sup> (19.8611 lbs/gal)</li> <li>· <b>Relative density:</b> Not determined.</li> <li>· <b>Vapor density:</b> Not applicable.</li> <li>· <b>Evaporation rate:</b> Not applicable.</li> <li>· <b>Solubility in / Miscibility with Water:</b> Not determined.</li> <li>· <b>Partition coefficient (n-octanol/water):</b> Not determined.</li> <li>· <b>Viscosity:</b> <ul style="list-style-type: none"> <li>Dynamic: Not applicable.</li> <li>Kinematic: Not applicable.</li> </ul> </li> <li>· <b>Other information:</b> No further relevant information available.</li> </ul>	

## 10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
- **Water hazard class 1 (Assessment by list):** slightly hazardous for water
- **Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
- **Must not be disposed of together with household garbage. Do not allow product to reach sewage system.**
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- |                                  |                 |
|----------------------------------|-----------------|
| · <b>UN-Number</b>               |                 |
| · <b>DOT, IMDG, IATA</b>         | UN2722          |
| · <b>UN proper shipping name</b> |                 |
| · <b>DOT</b>                     | Lithium nitrate |
| · <b>IMDG, IATA</b>              | LITHIUM NITRATE |

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· **Transport hazard class(es)**· **DOT**· **Class**

5.1 Oxidizing substances

· **Label**

5.1

· **IMDG, IATA**· **Class**

5.1 Oxidizing substances

· **Label**

5.1

· **Packing group**· **DOT, IMDG, IATA**

III

· **Environmental hazards:**· **Marine pollutant:**

No

· **Special precautions for user**

Warning: Oxidizing substances

· **Hazard identification number (Kemler code):** 50· **EMS Number:**

F-A,S-Q

· **Stowage Category**

A

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **DOT**· **Quantity limitations**

On passenger aircraft/rail: 25 kg

On cargo aircraft only: 100 kg

· **IMDG**· **Limited quantities (LQ)**

5 kg

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

· **UN "Model Regulation":**

UN 2722 LITHIUM NITRATE, 5.1, III

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.

· **Sara**· **Section 355 (extremely hazardous substances):** Substance is not listed.· **Section 313 (Specific toxic chemical listings):** Substance is listed.· **TSCA (Toxic Substances Control Act):** ACTIVE· **Hazardous Air Pollutants** Substance is not listed.

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- **Proposition 65**
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenic categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS03

- **Signal word** Warning
- **Hazard statements**  
May intensify fire; oxidizer.  
May intensify fire; oxidizer.
- **Precautionary statements**  
Keep away from heat.  
Keep/Store away from clothing/combustible materials.  
Take any precaution to avoid mixing with combustibles.  
Wear protective gloves/protective clothing/eye protection/face protection.  
In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Department issuing SDS:** Environment protection department.
- **Contact:**  
Date of Preparation / Last Revision:
- **Date of preparation / last revision**  
Revision 1.2, 05/15/2024: Reviewed SDS for accuracy. MH/STN  
05/15/2024
- **Abbreviations and acronyms:**  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
Oxidizing Liquids 3: Oxidizing liquids – Category 3

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*Oxidizing Solids 3: Oxidizing solids – Category 3*

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· **\* Data compared to the previous version altered.**

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