

Safety Data Sheet

File version: 1

Lithium nitrate, 1M

SDS Date: 12 Dec 2016

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**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

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**PRODUCT NAME:** 1M Lithium nitrate  
**PRODUCT CODES:** 1008220  
1008221  
**MANUFACTURER:** Rigaku Reagents  
**ADDRESS:** 9009 New Trails Drive  
The Woodlands, TX 77381  
USA  
**PHONE:** +1 (281) 362-2300  
**EMAIL:** ReagentOrders@Rigaku.com

**CHEMICAL NAME:** Lithium nitrate  
**CHEMICAL FORMULA:** LiNO<sub>3</sub>

**PREPARED BY:** Rigaku Reagents

SECTION 1 NOTES:

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**SECTION 2: HAZARDS IDENTIFICATION**

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**EMERGENCY OVERVIEW:****OSHA HAZARDS:** Oxidizer, carcinogen**TARGET ORGANS:** Central nervous system, kidney, cardio-vascular system, thyroid.**GHS CLASSIFICATION**  
Oxidizing solids (Category 3)**GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS****Signal word:** Warning**Hazard statement(s):**  
H272 May intensify fire; oxidizer.**Precautionary statement(s):**  
P220 Keep/Store away from clothing/ combustible materials.**POTENTIAL HEALTH EFFECTS:****EYES:** May cause eye irritation.**SKIN:** May be harmful if absorbed through skin. May cause skin irritation.**INGESTION:** May be harmful if swallowed.**INHALATION:** May be harmful if inhaled. May cause respiratory tract irritation.

SECTION 2 NOTES:

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

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**INGREDIENTS:** Lithium nitrate, De-ionized water**LITHIUM NITRATE:**

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>
7790-69-4	6-8	

SECTION 3 NOTES:

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**SECTION 4: FIRST AID MEASURES**

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**EYES:** Flush eyes with water as a precaution.**SKIN:** Wash off with soap and plenty of water. Consult a physician.**INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.**INHALATION:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.**SECTION 4 NOTES:**

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**SECTION 5: FIRE-FIGHTING MEASURES**

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**FLASH POINT:****F:** No data available**C:** No data available**AUTOIGNITION TEMPERATURE:****F:** No data available**C:** No data available**NFPA HAZARD CLASSIFICATION****HEALTH: 0****FLAMMABILITY: 0****REACTIVITY: 1****HMIS HAZARD CLASSIFICATION****HEALTH: 0****FLAMMABILITY: 0****REACTIVITY: 1****EXTINGUISHING MEDIA:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.**HAZARDOUS DECOMPOSITION PRODUCTS:** Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx), Lithium oxides**SECTION 5 NOTES:** Not flammable or combustible. Use water spray to cool unopened containers.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**PERSONAL PRECAUTIONS:** Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.**ENVIRONMENTAL PRECAUTIONS:** Do not let product enter drains.**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.**SECTION 6 NOTES:**

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**SECTION 7: HANDLING AND STORAGE**

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**HANDLING AND STORAGE:** Provide appropriate exhaust ventilation. Keep away from sources of ignition – No smoking. Keep away from heat and sources of ignition. Keep container tightly closed in a dry and well-ventilated place. Hygroscopic.**SECTION 7 NOTES:**

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**RESPIRATORY PROTECTION:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100

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(US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**EYE 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. Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**WORK HYGIENIC PRACTICES:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**SECTION 8 NOTES:**

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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**APPEARANCE:** clear, colorless

**PHYSICAL STATE:** clear liquid

**pH AS SUPPLIED:** No data available

**pH (Other):** No data available

**BOILING POINT:**

**F:** No data available

**C:** No data available

**FREEZING POINT:**

**F:** No data available

**C:** No data available

**VAPOR PRESSURE (mmHg):** No data available

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**F:** No data available

**C:** No data available

**VAPOR DENSITY (AIR = 1):** No data available

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** No data available

**EVAPORATION RATE:** No data available

**SOLUBILITY IN WATER:** soluble

**VISCOSITY:** No data available

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**F:** No data available

**C:** No data available

**SECTION 9 NOTES:**

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**SECTION 10: STABILITY AND REACTIVITY**

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**STABILITY:** Stable under recommended storage conditions.

**CONDITIONS TO AVOID (STABILITY):** Exposure to moisture.

**INCOMPATIBILITY (MATERIAL TO AVOID):** Powdered metals, combustible material, organic materials, reducing agents

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**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx), Lithium oxides. Other decomposition products - no data available

**SECTION 10 NOTES:**

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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**ACUTE TOXICITY:**

**ORAL LD50:** No data available.  
**INHALATION LC50:** No data available.  
**DERMAL LD50:** 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.  
**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.**SECTION 11 NOTES:**

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**SECTION 12: ECOLOGICAL INFORMATION**

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**TOXICITY**

No data available.

**PERSISTENCE AND DEGRADABILITY**

No data available.

**BIOACCUMULATIVE POTENTIAL**

No data available.

**MOBILITY IN SOIL**

No data available

**PBT AND vPvB ASSESSMENT**

No data available

**SECTION 12 NOTES:**

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**PRODUCT:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**CONTAMINATED PACKAGING:** Dispose of as unused product.

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**SECTION 14: TRANSPORT INFORMATION**

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**U.S. DEPARTMENT OF TRANSPORTATION**

PROPER SHIPPING NAME: Lithium nitrate solution  
HAZARD CLASS: 5.1  
ID NUMBER: 2722  
PACKING GROUP: III  
MARINE POLLUTANT: No  
POISON INHALATION HAZARD: No

**WATER TRANSPORTATION**

PROPER SHIPPING NAME: LITHIUM NITRATE SOLUTION  
HAZARD CLASS: 5.1  
ID NUMBER: 2722  
PACKING GROUP: III EMS-No: F-A, S-Q  
MARINE POLLUTANT: No

**AIR TRANSPORTATION**

PROPER SHIPPING NAME: Lithium nitrate solution  
HAZARD CLASS: 5.1  
ID NUMBER: 2722  
PACKING GROUP: III

**SECTION 14 NOTES:****SECTION 15: REGULATORY INFORMATION**

**OSHA HAZARDS:** Oxidizer, carcinogen

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

**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.

**SARA 311/312 HAZARDS:** Reactivity hazard, chronic health hazard

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS:**

No components are subject to the Massachusetts Right to Know Act.

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:**

	<u>CAS-No.</u>
Lithium nitrate	7790-69-4
Water	7732-18-5

**NEW JERSEY RIGHT TO KNOW COMPONENTS:**

	<u>CAS-No.</u>
Lithium nitrate	7790-69-4
Water	7732-18-5

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

**SECTION 15 NOTES:****SECTION 16: OTHER INFORMATION**

**DISCLAIMER:** The above information is believed to be correct but does not necessarily include all information and should be used only as a guide. The information in this document is based on our current knowledge and applies to the product with regard to appropriate safety precautions. This document does not represent any guarantee of the properties of the product. Rigaku Reagents will not be held liable for any damage resulting from handling or contact with the above product.