

# MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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## SECTION 1 Product Identification

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**CHEMICAL NAME:** Lithium Chloride  
**CAS #:** 7447-41-8  
**FORMULA:** LiCl  
**SYNONYM:** Lithium Monochloride

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## SECTION 2 Composition and Information on Ingredients

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| INGREDIENT:    | CAS #     | %   | ACGIH (TWA) | OSHA (PEL) |
|----------------|-----------|-----|-------------|------------|
| Title Compound | 7447-41-8 | >95 | no data     | no data    |

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## SECTION 3 Hazards Identification

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**EMERGENCY OVERVIEW:** May be harmful if swallowed. May cause central nervous system effects. May cause respiratory and digestive tract irritation. Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. Causes eye burns. May cause cardiac disturbances. Warning! Target Or galls: Central nervous system, cardiovascular system.

**EYE CONTACT:** Contact with eyes may cause severe irritation, and possible eye burns.

**SKIN CONTACT:** May cause severe irritation and possible burns. Prolonged absorption may affect electrolyte balance and impair kidney function. Dehydration, weight loss, skin effects, and thyroid disturbances have been reported.

**INHALATION:** : May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation .

**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 tremors and convulsions. May cause central nervous system effects

**CHRONIC HEALTH EFFECTS:** 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.

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## SECTION 4 First Aid Measures

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**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as

difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.  
**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

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## **SECTION 5                      Firefighting Measures**

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**FLASH POINT:** not applicable  
**AUTO IGNITION TEMPERATURE:** not applicable  
**EXPLOSION LIMITS:** not available  
**EXTINGUISHING MEDIUM:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.  
**SPECIAL FIREFIGHTING PROCEDURES:** If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

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## **SECTION 6                      Accidental Release Measures**

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**SPILL AND LEAK PROCEDURES:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

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## **SECTION 7                      Handling and Storage**

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**HANDLING AND STORAGE:** Store material in a tightly sealed container . Store in a cool, dry, well-ventilated area away from incompatible substances.

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## **SECTION 8                      Exposure Controls and Personal Protection**

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**EYE PROTECTION:** Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.  
**SKIN PROTECTION:** Chemical-resistant.  
**VENTILATION:** If possible, handle the material in an efficient fume hood.  
**RESPIRATOR:** If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

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## **SECTION 9                      Physical and Chemical Properties**

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**COLOR AND FORM:** white solid  
**MOLECULAR WEIGHT:** 42.394  
**MELTING POINT (DEG. C.):** 1135 deg F  
**BOILING POINT:** 2417 deg F  
**VAPOR PRESSURE:** 1mm Hg @ 547C  
**SPECIFIC GRAVITY:** 2.07 (water=1)  
**SOLUBILITY IN WATER:** soluble

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## **SECTION 10      Stability and Reactivity**

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**STABILITY:** Stable under normal temperatures and pressures.

**HAZARDOUS POLYMERIZATION:** Has not been reported

**CONDITIONS TO AVOID:** Incompatible materials, dust generation, excess heat.

**INCOMPATIBILITY:** Bromide trifluoride, strong acids

**DECOMPOSITION PRODUCTS:** Hydrogen chloride, chloride, irritating and toxic fumes and gases.

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## **SECTION 11      Toxicological Information**

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**RTECS DATA:** Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, skin: 500 mg/24H Severe; Oral, mouse: LD50 = 1165 mg/kg; Oral, rabbit: LD50 = 800 mg/kg; Oral, rat: LD50 = 526 mg/kg

**MUTAGENIC EFFECTS:** no data

**TETRATOGENIC EFFECTS:** no data

**CARCINOGENIC EFFECTS:** no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

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## **SECTION 12      Ecological Information**

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**ECOLOGICAL INFORMATION:** No information available

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## **SECTION 13      Disposal Considerations**

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**DISPOSAL:** Dispose of in according to local state and federal regulations.

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## **SECTION 14      Transportation Information**

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Non-hazardous

Non-hazardous

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## **SECTION 15      Regulatory Information**

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**TSCA:** Listed in the TSCA inventory

**SARA (TITLE 313):** Title compound not listed

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## **SECTION 16      Other Information**

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