



LTS Research Laboratories, Inc.
Safety Data Sheet
Lithium Chloride

1. Product and Company Identification

Trade Name: Lithium Chloride
Chemical Formula: LiCl
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 37 Ramland Road
City: Orangeburg
State: New York
Zip Code: 10962
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Warning



Hazard Statements: H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

Precautionary Statements: P261 Avoid breathing dust/fume/vapor
P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P280 Wear protective gloves/protective clothing/eye protection/face protection
P301+P312+P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
P302+P352 IF ON SKIN: Wash with soap and water
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P332+P313 If skin irritation occurs: Get medical advice/attention
P337+P313 If eye irritation persists get medical advice/attention
P362 Take off contaminated clothing and wash before reuse
P405 Store locked up
P501 Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):
Health: 2
Flammability: 0
Physical: 1

3. Composition

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| Chemical Family: | Ceramic |
| Additional Names: | N/A |
| LithiumChloride (LiCl): | |
| Percentage: | 0-100 wt% |
| CAS #: | 7447-41-8 |
| EC #: | 231-212-3 |

4. First Aid Procedures

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| General Treatment: | Seek medical attention if symptoms persist. |
| Special Treatment: | None |
| Important Symptoms: | None |
| Inhalation: | Remove victim to fresh air. Supply oxygen if breathing is difficult. Keep victim warm. Seek medical attention immediately. |
| Ingestion: | Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person. Seek medical attention. |
| Skin: | Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical attention |
| Eyes: | Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention. |

5. Firefighting Measures

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| Flammability: | Non-flammable |
| Extinguishing Media: | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Spec. Fire Fighting Procedure: | Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products. |

6. Accidental Release Measures

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| If Material Is Released/Spilled: | Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust. |
| Environmental Precautions: | Isolate runoff to prevent environmental pollution. Do not let product enter drains. |

7. Handling and Storage

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| Handling Conditions: | Handle under dry protective gas. Avoid contact with skin and eyes. Wash thoroughly after handling. |
| Storage Conditions: | Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10. |
| Work/Hygienic Maintenance: | Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air. |
| Ventilation: | Provide sufficient ventilation to maintain concentration at or below threshold limit. |

8. Exposure Controls and Personal Protection

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| Permissible Exposure Limits: | N/A |
| Threshold Limit Value: | N/A |
| Special Equipment: | Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. |
| Respiratory Protection: | Dust Respirator |
| Protective Gloves: | Rubber gloves |
| Eye Protection: | Safety glasses or goggles |
| Body Protection: | Protective work clothing. Wear close-toed shoes and long sleeves/pants. |

9. Physical and Chemical Characteristics

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| Color | White |
| Form: | Powder, Granules, Pellets, Sputtering target, Custom parts |
| Odor: | Odorless |
| Water Solubility: | Soluble |
| Boiling Point: | 1325-1360 °C |
| Melting Point: | 605 °C |
| Flash Point: | N/A |
| Autoignition Temperature: | N/A |
| Density: | 2.068 g/cc (at 20°C) |
| Molecular weight: | 42.39 g/mol |

10. Reactivity

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| Stability: | Stable under recommended storage conditions |
| Reacts With: | Oxidizing agents, strong acids, Bromine trifluoride |
| Incompatible Conditions: | Water/Moisture, Acids, Oxidizing agents |
| Hazardous Decomposition Products: | Metal oxide fume, Hydrogen chloride, Lithium oxide |

11. Toxicological Information

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| Potential Health Effects: | |
| Eyes: | Causes serious irritation |
| Skin: | Causes irritation |
| Ingestion: | Harmful if swallowed |
| Inhalation: | May cause irritation |
| Chronic: | N/A |
| Signs & Symptoms: | N/A |
| Aggravated Medical Conditions: | N/A |
| Median Lethal Dose: | 526 mg/kg for rat by mouth |
| Carcinogen: | 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. |

12. Ecological Information

Aquatic Toxicity: Toxicity to fish static test EC50 - Oncorhynchus mykiss (rainbow trout) - 158 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 249 mg/l

Persistent Bioaccumulation Toxicity: N/A
Very Persistent, Very Bioaccumulative: N/A

Notes: Do not allow material to be released to the environment without proper governmental permits
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
Avoid transfer into the environment.

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous: Not hazardous for transportation

Hazard Class: N/A
Packing Group: N/A
UN Number: N/A
Proper Shipping Name: N/A

15. Regulatory Information

Sec 302 Extremely Hazardous: N/A
Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: N/A

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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