



Lithium Chloride, Anhydrous Purified

CAS No. 7447-41-8

QS-PDS-1054 Revision: 03

Date of Last Revision: September 15, 2022

**Formula:** LiCl

**Appearance:** Free-flowing white crystals.\*

\* Occasional dark particles may be visible and scattered in the product. The particles have no detectable effect on product purity and will not be cause for rejection.

**Application:** Molten salt chemistry and metallurgy, brazing fluxes, catalyst for organic oxidation reactions, electrolyte in dry cells used in low temperatures, and stabilizer in textile fiber spinning solutions. Solubilizer for polyamides and cellulose when used with amide solvents, chlorinating agent for steroid agents. Desiccant for drying applications, tracer in wastewater.

<b>Product Specifications:</b>	LiCl, wt. %	99.3	min
	H <sub>2</sub> O, wt. % **	0.6	max
	Alkalinity as Li <sub>2</sub> CO <sub>3</sub> , wt. %	0.03	max
	NaCl, wt. %	0.015	max
	CaCl <sub>2</sub> , wt. %	0.03	max
	Fe <sub>2</sub> O <sub>3</sub> , wt. %	0.002	max
	SO <sub>4</sub> , wt. %	0.006	max
	Acid Insolubles, wt. %	100	max

\*\* Value (as weight percent loss) determined by drying @ 350°C for 45 minutes.

<b>Other Data:</b>	Loose Bulk Density	1.1 g/cc
	Tapped Bulk Density	1.2 g/cc

<b>Physical Properties:</b>	Molecular Weight	42.40
	Melting Point	608°C
	Boiling Point	1382°C
	Specific Heat @ 25°C	0.288 cal/g°C
	Standard Heat of Formation	-97.70 kcal/mole
	Heat of Solution @ 18°C	-8.49 kcal/mole
	Heat of Fusion	4.7 kcal/mole
	Density @ 25°C	2.068 g/cc



**Solubility:** Water solubility is 45.4 wt.% @ 25°C. Moderate solubility in organic solvents.

**Toxicity/Safety Data** *Information on toxicity, safety, handling, storage and disposal*  
**Handling / Storage / Disposal:** *is contained in the Safety Data Sheet (SDS) for this product.*

- Shipping Containers:**
- 50 Kg of product in a polyethylene-lined fiber drum. Nine (9) fiber drums per pallet.
  - 200 Kg of product in a polyethylene-lined fiber drum. Four (4) fiber drums per pallet.
  - 1000 Kg of product, in a lined super sack on a pallet.

**Shipping Limitations:** Shipments of lithium chloride require no dangerous goods shipping labels.

Post, Parcel, Air, Water, Rail, Truck      Acceptable within each carrier's weight limits and packaging requirements.