

Lithium Carbonate, Technical Grade

CAS-No.: 554-13-2

Date of Last Revision: Nov 1, 2023

Molecular Formula: Li_2CO_3

Application: Raw material for the glass, ceramics and enamel industries; basis material for the manufacture of other lithium compounds; catalyst for esterification; additive and flux for welding rods; additive in aluminum electrolysis melts; additive for quick-setting cement; and others.

Product Specifications:

Item	Specification	
$\text{Li}_2\text{CO}_3 \geq(\%)$	99.0	
Impurity Content $\leq(\%)$	Cl ⁻	0.015
	Na	0.084
	Ca	0.016
	Mg	0.007
	SO_4^{2-}	0.054
	Fe_2O_3	0.003
	K	0.001
	B	0.003
	Insoluble Matter	0.017
	LOI (550° C)	0.744
Screen Analysis $\leq(\%)$	-200 mesh	25
	+200 mesh	100
	+140 mesh	100
	+100 mesh	100
	+60 mesh	100
	+40 mesh	100
	+30 mesh	100
	+20 mesh	0.8
+10 mesh	0.2	
Compacted bulk density $\geq(\text{Lb}/\text{ft}^3)$	55	
Apparent density (FFD) $\geq(\text{Lb}/\text{ft}^3)$	42	

Physical Properties:

Appearance:	Colorless, fine powder to granular
Molecular weight:	73.89g/mol
Melting point:	722°C
Boiling point:	ca. 1,310°C

Handling & Storage:

Advice on protection against fire and explosion:	Normal measures for preventive fire protection.
Advice on safe handling:	Provide sufficient air exchange and/or exhaust in work rooms. Avoid creating dust. Handle in accordance with good industrial hygiene and safety practice. In general, emissions are controlled and prevented by implementing an appropriate management system, including regular informing and training workers.
Conditions for safe storage:	Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from moisture.
Materials to avoid:	Do not store near acids.