

**Lithium Carbonate, technical grade, min. 99.0 %
Li₂CO₃**

PRODUCT Lithium Carbonate, technical grade, min. 99.0 % Li₂CO₃

Product No. 401203

CAS-No. 554-13-2 EINECS-No. 209-062-5

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.

APPEARANCE White, finely-granulated powder

FORMULA Li₂CO₃

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**PHYSICAL
 PROPERTIES**

Molecular weight:	73.89	
Density:	2.11 g/ccm (at 20 °C)	
Thermal Stability:	Decomposition: 600 °C	
Solubility:	Temp. °C	g Li ₂ CO ₃ / 100 g H ₂ O
	0	1.54
	20	1.33
	40	1.17
	60	1.01
	80	0.85
	100	0.72

Screen Analysis:	mm	mesh	typical	guaranteed
	> 0.840	+20	0.3 %	max. 0.8 %
	0.420 - 0.840	-20 / +40	47 %	
	0.250 - 0.420	-40 / +60	21 %	
	0.149 - 0.250	-60 / +100	12 %	
	0.105 - 0.149	-100 / +140	2 %	
	0.074 - 0.105	-140 / +200	0.7 %	
	< 0.074	-200	17 %	max. 25 %

Smaller particle size (eg. < 100 or < 40 µm) and granules also available.

Bulk Density:	approx. 0.8 g/ccm
Melting Point:	732 °C

SPECIFICATION

Chemical analysis:	typical	guaranteed
	Li ₂ CO ₃ *)	99.4 %
Cl	0.01 %	max. 0.015 %
K	0.0003 %	max. 0.001 %
Na	0.06 %	max. 0.08 %
Mg	0.004 %	max. 0.01 %
SO ₄	0.04 %	max. 0.05 %

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Fe ₂ O ₃	0.001 %	max. 0.003 %
Ca	0.01 %	max. 0.016 %
Loss at 550 °C	0.6 %	max. 0.75 %
H ₂ O (110 °C)	0.14 %	

*) Determination by titration with potentiometric endpoint indication

METHOD OF ANALYSIS

Li ₂ CO ₃	acidimetrically with H ₂ SO ₄
Cl	argentom. titrating apparatus
K	FES/AAS
Na	FES/AAS
Mg	ICP-Method
SO ₄	IC
Fe ₂ O ₃	ICP-Method
Ca	FES/AAS

HANDLING

No special precautions necessary.

TRANSPORT REGULATIONS

Other: None.
No regulations according to RID, ADR, IMDG and IATA-DGR.

MARKING

Xn harmful

R&S phrases: See Material Safety Data Sheet

PACKING

25 kg-bags on pallets of 1,000 kg, 100 kg fiber drums with polyethylene lining or 1,000 kg big bags.

TIME OF DELIVERY

In general prompt after receipt of order.

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**FURTHER RELATED
DOCUMENTS**

Lithium Salts brochure, Material Safety Data Sheet.

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