

TECHNICAL DATA SHEET

Date of Issue: 2018/02/19

Lithium Carbonate, technical grade, min. 99.0 %

CAS-No.	554-13-2
EC-No.	209-062-5
REACH No.	01-2119516034-53
Molecular Formula	Li ₂ CO ₃
Product Number	401203

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.

SPECIFICATION

	Specification	Method of Analysis
Li ₂ CO ₃ *)	min. 99.0 %	acidimetric titration
Cl	max. 0.015 %	argentometric titration
K	max. 0.001 %	ICP
Na	max. 0.08 %	ICP
Mg	max. 0.01 %	ICP
SO ₄	max. 0.05 %	ICP
Fe ₂ O ₃	max. 0.003 %	ICP
Ca	max. 0.016 %	ICP
Loss at 550 °C	max. 0.75 %	gravimetry

*) Determination by titration with potentiometric endpoint indication

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Technical data sheets may change frequently. You can download the latest version from our website www.albemarle-lithium.com. Please contact us at www.albemarle-lithium.com/contact with questions.

PHYSICAL PROPERTIES

Appearance	fine powder to granular
Color	colorless
Melting point/ range	722 °C Method: OECD Test Guideline 102
Boiling point/boiling range	ca. 1,310 °C
Density	2.11 g/cm ³ at 20 °C
Bulk density	ca. 430 kg/m ³ (401260 - BG <40µm) ca. 430 kg/m ³ (401303 - TG Industrial Grade) ca. 500 kg/m ³ (401223 - TG Fines) ca. 890 kg/m ³ (401203 - TG Compacted) ca. 940 kg/m ³ (401211 - TG Granules) ca. 950 kg/m ³ (401202 - TG Coarse Crystal)
Water solubility	8.4 g/L at 20 °C Method: OECD Test Guideline 105
Molecular weight	73.89 g/mol

Screen Analysis

mm	mesh	typical
> 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.

Thermal Stability Decomposition: 600 °C

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HANDLING & STORAGE

Handling No special precautions necessary.

TRANSPORT & PACKAGING

ADR
Not regulated as a dangerous good

Hazard pictograms



Signal Word Warning

H&P Phrases See Safety Data Sheet

Labelling The labelling is according to EU-GHS classification ((EG) 1272/2008) and may vary in other countries. Please refer to the respective Safety Data Sheet for your country.

Packaging

25 kg-bags on pallets of 1,000 kg, 1,000 kg big bags.

OTHER INFORMATION

Further Related Documents Safety Data Sheet

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