

# TECHNICAL DATA SHEET

Date of Issue: 2017/12/14

## Lithium Carbonate, fines

CAS-No.	554-13-2
EC-No.	209-062-5
REACH No.	01-2119516034-53
Molecular Formula	Li <sub>2</sub> CO <sub>3</sub>
Product Number	401223

### 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

#### Chemical analysis:

	Specification	Method of Analysis
Li <sub>2</sub> CO <sub>3</sub> *)	min. 99.0	acidimetric titration
Cl	max. 0.015	argentometric titration
K	max. 0.001	ICP
Na	max. 0.09	ICP
Mg	max. 0.01	ICP
SO <sub>4</sub>	max. 0.05	ICP
Fe <sub>2</sub> O <sub>3</sub>	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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## PHYSICAL PROPERTIES

Appearance	fine powder to granular
Colour	colourless
Melting point/ range	722 °C Method: OECD Test Guideline 102
Boiling point/boiling range	ca. 1,310 °C
Density	2.11 g/cm <sup>3</sup> at 20 °C
Bulk density	ca. 430 kg/m <sup>3</sup> (401260 - BG <40µm) ca. 430 kg/m <sup>3</sup> (401303 - TG Industrial Grade) ca. 500 kg/m <sup>3</sup> (401223 - TG Fines) ca. 890 kg/m <sup>3</sup> (401203 - TG Compacted) ca. 940 kg/m <sup>3</sup> (401211 - TG Granules) ca. 950 kg/m <sup>3</sup> (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	US mesh	typical (%)
> 0.840	+20	0.0
0.420 - 0.840	-20 / +40	0.1
0.250 - 0.420	-40 / +60	0.1
0.149 - 0.250	-60 / +100	4.3
0.105 - 0.149	-100 / +140	8.0
0.074 - 0.105	-140 / +200	4.0
< 0.250	-60	99.5 (min. 98.5)

Thermal Stability      Decomposition: 600 °C

Additional Physical Properties      Specific weight: 2.11 g/ccm

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## HANDLING & STORAGE

Handling No special precautions necessary.

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## 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 paper bags on pallet with polyethylene stretch wrap; 500 kg bulk bags.

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## OTHER INFORMATION

Further Related Documents Safety Data Sheet

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