

TECHNICAL DATA SHEET

Date of Issue: 2017/12/12

Lithium Carbonate, battery grade < 40 micron

CAS-No.	554-13-2
EC-No.	209-062-5
REACH No.	01-2119516034-53
Molecular Formula	Li ₂ CO ₃
Product Number	401260

APPLICATION Raw material for manufacturing lithium ion battery cathode materials, and others.

SPECIFICATION

Chemical analysis:

Chemical	Guaranteed
Li ₂ CO ₃ *)	min. 99.8 %
Cl	max. 0.015 %
K	max. 0.001 %
Na	max. 0.065 %
Mg	max. 0.007 %
SO ₄	max. 0.050 %
Fe	max. 0.001 %
Ca	max. 0.016 %
H ₂ O (110 °C)	max. 0.35 %

*) calculated in dry substance

METHOD OF ANALYSIS

Li ₂ CO ₃	acidimetrically with H ₂ SO ₄
Cl	argentometric titration

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Albemarle Corporation and its subsidiaries and affiliates. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. The user should consider any health or safety hazards or information contained herein only as a guide, and should take those precautions which are necessary or prudent to instruct employees and to develop work practice procedures in order to promote a safe work environment. Further, nothing contained herein shall be taken as an inducement or recommendation to manufacture or use any of the herein materials or processes in violation of existing or future patent.

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.



K	ICP
Na	ICP
Mg	ICP
SO4	IC
Fe	ICP
Ca	ICP

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 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

Particle Size	Guaranteed
D 100	40.0 max.
D 90	13.0 max.
D 50	4.5 max.
D 10	1.6 max.

Thermal Stability	Decomposition: 600 °C
-------------------	-----------------------

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Albemarle Corporation and its subsidiaries and affiliates. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. The user should consider any health or safety hazards or information contained herein only as a guide, and should take those precautions which are necessary or prudent to instruct employees and to develop work practice procedures in order to promote a safe work environment. Further, nothing contained herein shall be taken as an inducement or recommendation to manufacture or use any of the herein materials or processes in violation of existing or future patent.

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

1000 kg, 500 kg and 333 kg bulk bags, 25 kg paper bags

OTHER INFORMATION

Further Related Documents Safety Data Sheet

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Albemarle Corporation and its subsidiaries and affiliates. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. The user should consider any health or safety hazards or information contained herein only as a guide, and should take those precautions which are necessary or prudent to instruct employees and to develop work practice procedures in order to promote a safe work environment. Further, nothing contained herein shall be taken as an inducement or recommendation to manufacture or use any of the herein materials or processes in violation of existing or future patent.

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.