TECHNICAL DATA SHEET

Date of Issue: 2021/07/22

Cesium Carbonate, milled grade, purity min. 99.9 %

CAS-No.	534-17-8
EC-No.	208-591-9
REACH No.	01-2120089561-51-0000
Molecular formula	Cs2CO3
Product number	10000348

APPLICATION

Cesium carbonate is a versatile base in organic synthesis. The milled grade is e.g. used in heterogeneous reactions benefiting from a large surface area.

PURITY

min. 99.9 %

SPECIFICATION

Li	max. 5 ppm
Na	max. 100 ppm
K	max. 200 ppm
Rb	max. 200 ppm
Ca	max. 5 ppm
Mg	max. 2 ppm
Ba	max. 30 ppm
Sr	max. 5 ppm

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.

ALBEMARLE®

Al	max. 10 ppm
Fe	max. 3 ppm
Cr	max. 2 ppm
P2O5	max. 15 ppm
SO4	max. 50 ppm
Cl	max. 100 ppm
NO3	max. 25 ppm
SiO2	max. 40
weight loss	max. 0.5 %

Due to the nature of the production process, small amounts of cesium will be present either as hydroxide or as bicarbonate. Deliveries are accompanied by a lot specific certificate of analysis. If any of these values is critical to your application, please let us know.

PHYSICAL PROPERTIES

Appearance	solid
Colour	white colourless
Melting point/range	> 400 °C Method: OECD Test Guideline 102
Density	4.16 g/cm3 at 20 °C Method: OECD Test Guideline 109
Bulk density	1,300 kg/m3
Water solubility	2,615 g/l at 15 °C
Molecular weight	325.82 g/mol
Additional Physical Properties	Particle size distribution: x50 max. 20 µm x90max. 50 µm

HANDLING & STORAGE

Handling	Handling in moist air should be avoided. Contact with skin and eyes or ingestion will cause serious caustic burns.

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.

ALBEMARLE®

Storage	Because of its hygroscopicity cesium carbonate should be stored in tightly closed containers.

TRANSPORT & PACKAGING

ADR
Not regulated as a dangerous good

Hazard pictograms

Signal word	Danger
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

Polyethylene bags with aluminium barrier in drums (fiber drums, clamping ring drums, steel drums, steel drums with polypropylene inner lining). The aluminium barrier prevents diffusion of moisture into the product. Alternative packaging on request. Smaller units are available at surcharge.

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.

ALBEMARLE®