

TECHNICAL DATA SHEET

Date of Issue: 2016/08/26

Cesium Carbonate, milled grade, purity min. 99.9 %

CAS-No.	534-17-8
EC-No.	208-591-9
REACH No.	01-2120089561-51
Molecular Formula	Cs ₂ CO ₃
Product Number	426013

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
Al	max. 10 ppm
Fe	max. 3 ppm
Cr	max. 2 ppm
P2O5	max. 15 ppm
SO4	max. 50 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.

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Cl	max. 100 ppm
NO ₃	max. 25 ppm
SiO ₂	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
Color	colorless white
Melting point/ range	> 400 °C Method: OECD Test Guideline 102
Decomposition temperature	610 °C
Density	4.16 g/cm ³ at 20 °C Method: OECD Test Guideline 109
Bulk density	ca. 1,300 kg/m ³
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 x90 max. 50 µm

HANDLING & STORAGE

Handling	Handling in moist air should be avoided. Contact with skin and eyes or ingestion will cause serious caustic burns.
Storage	Because of its hygroscopicity cesium carbonate should be stored in tightly closed containers.

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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 Safety Data Sheet
Documents

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