

TECHNICAL DATA SHEET

Date of Issue: 2021/07/22

Cesium Nitrate for pyrotechnics, purity min. 99.9 %

CAS-No.	7789-18-6
EC-No.	232-146-8
REACH No.	01-2119979571-26-0000
Molecular formula	CsNO ₃
Product number	10000345, 10000496, 10001192, 10001888, 10001889

APPLICATION	This cesium nitrate grade provides a free flowing fine powder for pyrotechnical applications.
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PURITY	min. 99.9 %
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SPECIFICATION

Li	max. 1 ppm
Na	max. 20 ppm
K	max. 50 ppm
Rb	max. 150 ppm
Ca	max. 2 ppm
Mg	max. 0.5 ppm
Sr	max. 2 ppm
Ba	max. 20 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.

Al	max. 1 ppm
Fe	max. 1 ppm
Cr	max. 1 ppm
Mn	max. 1 ppm
SO ₄	max. 50 ppm
Cl	max. 50 ppm
P ₂ O ₅	max. 1 ppm
insolubles *)	max. 0.1 - 1 %

* basically highly dispersed silica (HDS) 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	Crystalline powder
Colour	white
Melting point/range	401 °C at 1,013 hPa Method: OECD Test Guideline 102
Density	3.64 g/cm ³ at 20 °C Method: OECD Test Guideline 109
Water solubility	239.5 g/l at 20 °C Method: OECD Test Guideline 105
Molecular weight	194.91 g/mol
Additional Physical Properties	Particle size x50: 45 - 75 µm

HANDLING & STORAGE

Handling	Like all nitrates, cesium nitrate is an oxidizer and should not be brought into contact with flammable substances and oxidizable powders (risk of fire hazards). Avoid contact with strong acids and high temperatures (generation of nitric oxide fumes).
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TRANSPORT & PACKAGING

UN number 1451

ADR	Class: 5.1	PG: III	Label: 5.1
RID	Class: 5.1	PG: III	Label: 5.1
IMDG	Class: 5.1	PG: III	Label: 5.1
IATA_C	Class: 5.1	PG: III	Packing instruction (cargo aircraft): 563
IATA_P	Class: 5.1	PG: III	Packing instruction (passenger aircraft): 559

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 bottles or 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 available at surcharge.

OTHER INFORMATION

Further Related Safety Data Sheet
Documents

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