

TECHNICAL DATA SHEET

Date of Issue: 2021/07/22

Cesium Iodide, purity min. 99.999 %, doped with TlI

CAS-No.	7789-17-5
EC-No.	232-145-2
REACH No.	01-2119977123-37-0000
Molecular formula	Cs-I
Product number	10001860, 10001861, 10001862

APPLICATION	Cesium iodide is a highest purity product particularly used for scintillation purposes, e.g. in medical imaging.
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PURITY	min. 99.999 %
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SPECIFICATION

Li	max. 0.2 ppm
K	max. 0.5 ppm
Rb	max. 0.5 ppm
Ca	max. 0.1 ppm
Mg	max. 0.1 ppm
Sr	max. 0.2 ppm
Ba	max. 0.5 ppm
Al	max. 0.1 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.

Fe	max. 0.1 ppm
Cr	max. 0.1 ppm
Mn	max. 0.1 ppm
SO ₄	max. 5 ppm
SiO ₂	max. 0.5 ppm
Zn	max. 0.2 ppm
Ni	max. 0.5 ppm
NO ₃	max. 5 ppm
Cl	max. 5 ppm
Br	max. 5 ppm
IO ₃	max. 5 ppm
insolubles (before doping)	max. 25 ppm
weight loss (500 °C)	max. 0.1 %
TlI	max. 1 %

Various other sodium iodide doped products are available. 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 to light yellow
Melting point/range	ca. 628 °C at 1,013 hPa Method: OECD Test Guideline 102
Boiling point/boiling range	ca. 1,280 °C
Density	4.51 g/cm ³ at 20 °C
Bulk density	2,200 - 3,300 kg/m ³
Water solubility	669.7 g/l at 20 °C Method: OECD Test Guideline 105 (Cesium iodide)
Molecular weight	259.81 g/mol

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HANDLING & STORAGE

Storage Cesium iodide is hygroscopic and should thus be stored in tightly closed containers under exclusion of moisture.

TRANSPORT & PACKAGING

UN number 3077

ADR	Class: 9	PG: III	Label: 9
RID	Class: 9	PG: III	Label: 9
IMDG	Class: 9	PG: III	Label: 9
IATA_C	Class: 9	PG: III	Packing instruction (cargo aircraft): 956
IATA_P	Class: 9	PG: III	Packing instruction (passenger aircraft): 956

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

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.

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OTHER INFORMATION

Further Related Documents Safety Data Sheet

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