# **TECHNICAL DATA SHEET**

Date of Issue: 2016/08/29

# Cesium Iodide, purity min. 99.999 %, doped with TII

CAS-No. 7789-17-5

EC-No. 232-145-2

REACH No. 01-2119977123-37

Molecular Formula

Product Number 424043, 424044

APPLICATION Cesium iodide is a highest purity product particularly used for scintillation purposes,

e.g. in medical imaging.

#### **FURTHER INGREDIENTS**

Thalliumiodid

CAS-No. 7790-30-9 EC-No. 232-199-7

PURITY min. 99.999 %

## **SPECIFICATION**

Li	max. 0.2 ppm		
K	max. 0.5 ppm		
Rb	max. 0.5 ppm		
Са	max. 0.1 ppm		
Mg	max. 0.1 ppm		
Sr	max. 0.2 ppm		
Ва	max. 0.5 ppm		
Al	max. 0.1 ppm		
Fe	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.



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Cr	max. 0.1 ppm	
Mn	max. 0.1 ppm	
SO4	max. 5 ppm	
SiO2	max. 0.5 ppm	
Zn	max. 0.2 ppm	
Ni	max. 0.5 ppm	
NO3	max. 5 ppm	
CI	max. 5 ppm	
Br	max. 5 ppm	
IO3	max. 5 ppm	
insolubles (before doping)	max. 25 ppm	
weight loss (500 °C)	max. 0.1 %	
TII	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 solid

Color white to yellowish

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/cm3 at 20 °C

Bulk density 2,200 - 3,300 kg/m3

Water solubility 848 g/L at 25 °C ([CAS: 7789-17-5])

0.063 g/L at 20 °C ([CAS: 7790-30-9])

Molecular weight 259.81 g/mol

## HANDLING & STORAGE

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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.

# OTHER INFORMATION

Further Related Documents

Safety Data Sheet

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