

TECHNICAL DATA SHEET

Date of Issue: 2016/08/24

Cesium Metal, purity min. 99.99 %

CAS-No. 7440-46-2

EC-No. 231-155-4

Molecular Formula Cs

Product Number 424000

APPLICATION

Cesium metal can be used as ionic source, in lamps, doping of fullerenes, in atomic beam oscillators, photocells, thermoionic converters etc. [Ref.: H. Hofmann, J. Weinrich; Metall 7 (1992)].

PURITY

min. 99.99 %

SPECIFICATION

Li	max. 1 ppm
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Na	max. 20 ppm
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K	max. 10 ppm
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Rb	max. 10 ppm
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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 (< 28,65 °C)

liquid (> 28,65 °C)

Color gold brown

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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Melting point/ range	28.65 °C
Boiling point/boiling range	708 °C
Density	1.873 g/cm ³ at 25 °C
Water solubility	(Not applicable)
Molecular weight	132.91 g/mol
Additional Physical Properties	Ionization potential: 3.89 eV

HANDLING & STORAGE

Handling	Due to its extreme reactivity towards oxygen, water and acids contact with these substances and with air must be avoided under all circumstances.
Storage	Cesium metal is stable if stored in sealed glass ampoules or in stainless steel containers. Care should be taken not to break glass ampoules.

TRANSPORT & PACKAGING

UN number 1407

ADR	Class: 4.3	PG: I	Label: 4.3
RID	Class: 4.3	PG: I	Label: 4.3
IMDG	Class: 4.3	PG: I	Label: 4.3
IATA_C	Class: 4.3	PG: I	Packing instruction (cargo aircraft): 487
IATA_P	Class: 4.3	PG: I	

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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

Packaging in borosilicate glass ampoules.

Normal ampoules:

Packaging code	811	812	813	816	817
Metal filling (g)	1	5	10	50	100
Volume (cm ³)	2	7	12	42	109
Glass thickness (mm)	1-2	1-2	1-2	1-2	1-2
LA - Length ampoule (mm)	42	80	85	140	100
DT - Diameter tube (mm)	5	5	5	5	5
DA - Diameter ampoule (mm)	9	11	14	20	40

Breakseal ampoules:

Packaging code	821	823	824	825
Metal filling (g)	1	5	10	50
Volume (cm ³)	3	7	12	42
Glass thickness (mm)	1-2	1-2	1-2	1-2
LA - Length ampoule (mm)	30	80	85	140
DT - Diameter tube (mm)	5	5	5	5
DA - Diameter ampoule (mm)	12	11	14	20
LBS - Length breakseal (mm)	10-20	10-20	10-20	10-20
LPT- Length protection tube (mm)	75	75	75	75

For more information regarding the ampoules, please see our webpage.

OTHER INFORMATION

Further Related Safety Data Sheet
Documents

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