

TECHNICAL DATA SHEET

Date of Issue: 2021/05/03

Barium Metal, rods under argon

CAS-Nr.	7440-39-3
EG-Nr.	231-149-1
REACH Nr.	01-2120734309-53-0001
Summenformel	Ba
Produktnummer	451130 , 451,170

APPLICATION

Barium is mainly used for the production of evaporation getters (gas absorbers) in CRTs (cathode ray tubes) for television to generate and to maintain the high vacuum by reaction with detrimental gases. Furthermore it is used as getter material in thermionic and emitter tubes and in sodium vapor lamps. The deoxidizing and reducing properties of this metal find numerous minor applications in the metal refining and alloying industry.

SPECIFICATION

	451130	451170
Ba (incl. Sr)	min. 98.9 %	min. 99.0 %
Sr	max. 1.6 %	max. 0.8 %
Ca	max. 0.25 %	max. 0.10 %
Al	max. 0.06 %	max. 0.05 %
Mg	max. 0.02 %	max. 0.01 %
N	max. 0.06%	max. 0.06 %
Fe	max. 0.02 %	max. 0.01 %
Cl	max. 0.01 %	max. 0.01 %
Li	max. 0.01 %	max. 0.01 %
Na	max. 0.01 %	max. 0.01 %

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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K	max. 0.01 %	max. 0.01 %
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METHOD OF ANALYSIS

Barium gravimetrically and impurities by spectral analysis and special analytical procedures.

PHYSICAL PROPERTIES

Aussehen	Stangen/Blöcke
Farbe	grau
Schmelzpunkt/Schmelzbereich	727 °C bei 1,013 hPa
Flammpunkt	(Nicht anwendbar)
Siedepunkt/Siedebereich	1,637 °C
Dichte	3.62 g/cm ³ bei 20 °C
Wasserlöslichkeit	(Zersetzt sich bei Kontakt mit Wasser.)
Molekulargewicht	137.34 g/mol

HANDLING & STORAGE

Handling Highly flammable solid. Contact with water liberates highly flammable gases! Barium is a metal of the earth alkaline group. It quickly oxidizes in air and therefore has to be strictly kept under a protective inert medium like paraffin oil or argon gas. The metal is flammable and has a high affinity to oxygen, nitrogen, hydrogen and the halogens. Barium reacts violently with water, acids or alcohols developing hydrogen and forming alkaline caustic decomposition products. Avoid contact with water, acids, alcohols and air; prevent contact with skin; store tightly sealed. Wear protective goggles and gloves; cover burning barium with dry sand, never use water. MAK value (1990): 0.5 mg/m³ ref. to Ba See our Safety Data Sheet!

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TRANSPORT & PACKAGING

UN-Nummer 1400

ADR	Klasse: 4.3	PG: II	Label: 4.3
RID	Klasse: 4.3	PG: II	Label: 4.3
IMDG	Klasse: 4.3	PG: II	Label: 4.3
IATA_C	Klasse: 4.3	PG: II	Verpackungsanweisung (Frachtflugzeug): 490
IATA_P	Klasse: 4.3	PG: II	Verpackungsanweisung (Passagierflugzeug): 484

Gefahrenpiktogramme



Signalwort

Gefahr

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.

Verpackung

Tin cans and sealed drums holding up to 100 kg capacity.

OTHER INFORMATION

Further Related Documents

Safety Data Sheet

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