

TECHNICAL DATA SHEET

Date of Issue: 2021/05/03

Barium Metal, rods under paraffin oil

CAS-Nr.	7440-39-3
EG-Nr.	231-149-1
REACH Nr.	01-2120734309-53-0001
Summenformel	Ba
Produktnummer	451120 , 451,160

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.

FURTHER INGREDIENTS

Weißes Mineralöl (Erdoel)

CAS-Nr.	8042-47-5
EG-Nr.	232-455-8

SPECIFICATION

	451120	451160
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 %

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Cl	max. 0.01 %	max. 0.01 %
Li	max. 0.01 %	max. 0.01 %
Na	max. 0.01 %	max. 0.01 %
K	max. 0.01 %	max. 0.01 %

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 (Barium)
Viskosität, kinematisch	16 mm ² /s bei 40 °C Methode: DIN 51562 (Schutzmittel)
Siedepunkt/Siedebereich	1,897 °C (Barium)
Dichte	3.62 g/cm ³ bei 20 °C (Barium)
Wasserlöslichkeit	(Nicht anwendbar)
Molekulargewicht	137.34 g/mol
Additional Physical Properties	Delivered Form: Rods, diameter 22 mm, length up to 450 mm; rod sections.

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/m ³ 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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