



# Barium metal rods under paraffin oil

**Article number** 451120 – Sr ≤ 1.6%  
451160 – Sr ≤ 0.8%  
451150 – Sr ≤ 0.1%

**CAS-No.** 7440-39-3

**Typical** Formula: Ba  
**Properties** Colour: grey

**Delivered Form** Rods, diameter 22 mm, length up to 450 mm; rod sections

**Applications** Barium is mainly used for the production of evaporation getters (gas absorbers) in CRT's (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 vapour lamps. The deoxidizing and reducing properties of this metal find numerous minor applications in the metal refining and alloying industry.

**Characteristics** **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.

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# Barium metal rods under paraffin oil

Typical		451120	451160	451150
Analysis	<b>Ba (incl. Sr)</b>	≥ 98.9 %	≥ 99.0 %	≥ 99.2 %
	<b>Sr</b>	≤ 1.6 %	≤ 0.8 %	≤ 0.1 %
	<b>Ca</b>	≤ 0.25 %	≤ 0.10 %	≤ 0.05 %
	<b>Al</b>	≤ 0.06 %	≤ 0.05 %	≤ 0.05 %
	<b>C</b>	≤ 0.06 %	≤ 0.05 %	≤ 0.05 %
	<b>Mg</b>	≤ 0.02 %	≤ 0.01 %	≤ 0.01 %
	<b>N</b>	≤ 0.02 %	≤ 0.02 %	≤ 0.02 %
	<b>Fe</b>	≤ 0.02 %	≤ 0.01 %	≤ 0.01 %
	<b>Cl</b>	≤ 0.01 %	≤ 0.01 %	≤ 0.01 %
	<b>Li</b>	≤ 0.01 %	≤ 0.01 %	≤ 0.01 %
	<b>Na</b>	≤ 0.01 %	≤ 0.01 %	≤ 0.01 %
	<b>K</b>	≤ 0.01 %	≤ 0.01 %	≤ 0.01 %

**Recommended test methods** Barium gravimetrically and gas volumetrically; impurities by spectral analysis and special analytical procedures

**Handling** 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<sup>3</sup> ref. to Ba  
**See our material safety data sheet!**

**Packaging** Tin cans and sealed drums holding up to 100 kg capacity

**Transport classification** Please refer to our safety datasheet for these products.