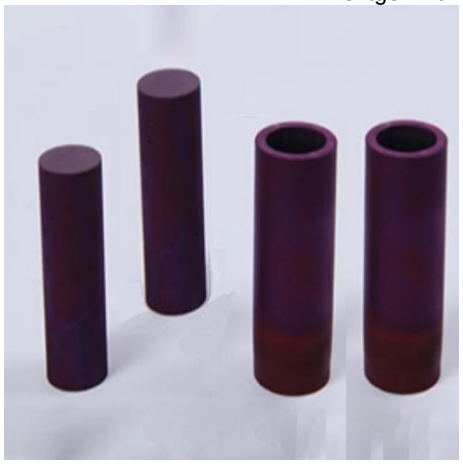


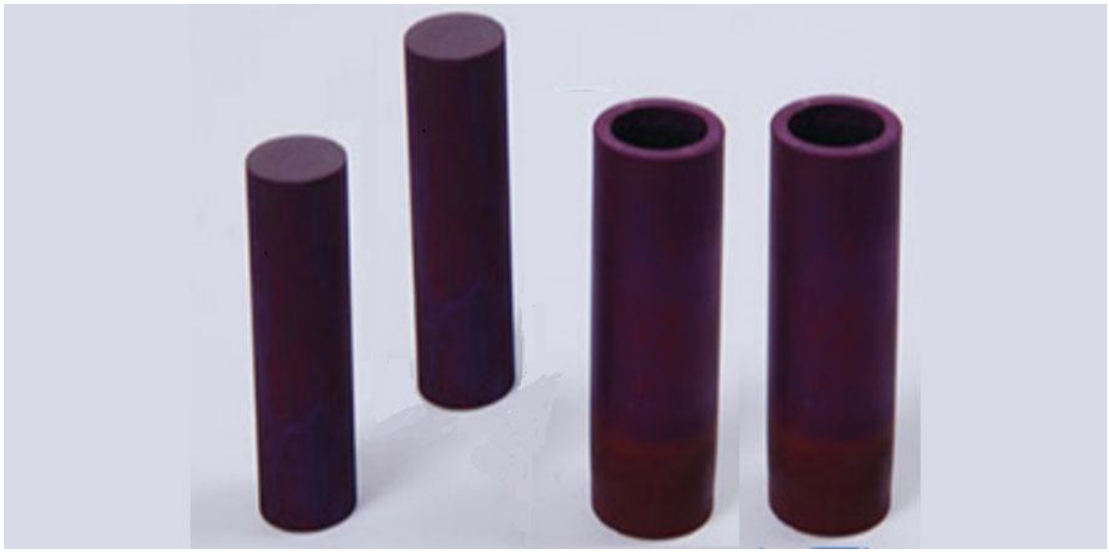
Cerium Hexaboride Tube

Cerium Boride, also called Cerium Hexaboride or CeB6, is a refractory ceramic material. Nextgen Advanced Materials supplies Cerium Hexaboride Tubes with high quality and fast delivery, and customized products are also available.

Product Description

You are welcomed to come to our factory to buy the latest selling, low price, and high-quality Nextgen Cerium Hexaboride Tube. We look forward to cooperating with you. Cerium Boride, also called Cerium Hexaboride or CeB6, is a refractory ceramic material. The principal use of cerium hexaboride is a coating of hot cathodes, or hot cathodes made of cerium hexaboride crystals. It usually operates at temperature of 1450 °C.

Cerium hexaboride, like lanthanum hexaboride, slowly evaporates during the cathode operation. In conditions where CeB6 cathodes are operated under 1850 K, CeB6 should maintain its optimum shape longer and therefore last longer. While the process is about 30% slower than with lanthanum boride, the cerium boride deposits are reported to be more difficult to remove.



Material Data for LaB6 and CeB6

Parameter	Units	LaB6	CeB6
Stoichiometry	N/A	~6	
Metal Impurities	ppm by wt.	＜30	
Density	g/cm3	4.72	4.80
Coefficient of Thermal Expansion	α x 106	5.6	6.2
Electrical Resistivity	μΩ-cm	~50	~65
Effective Work Function (100) at 1800 K	eV	2.70	2.65
Spectral Emissivity at 0.65 microns	N/A	0.765	0.779
Evaporation rate at 1800 K (UHV)	g/cm2/s	2.2 x 10-9	1.6 x 10-9
Orientation limit for specific orientation	degrees	＜2	
Pyrolitic block mount resistance @ 1800 K	Ohms	1.45	