



Lanthanum Hexaboride Powder

Nextgen Advanced Materials INC is manufacturer & supplier who mainly produces Lanthanum Hexaboride Powder with many years of experience. Hope to build business relationship with you.

Lanthanum Boride, also called Lanthanum Hexaboride or LaB₆, is an inorganic chemical and refractory ceramic material. Nextgen Advanced Materials supplies lanthanum boride powders with

high quality and fast delivery, and customized products are available.

Product Description

Buy Nextgen Lanthanum Hexaboride Powder which is of high quality directly with low price. Lanthanum Boride, also called Lanthanum Hexaboride or LaB₆, is an inorganic chemical and refractory ceramic material. It has a high melting point of 2210 °C and is insoluble in water and hydrochloric acid. It has a low work function and one of the highest electron emissivity known, and is stable in a vacuum. Therefore, the principal use of lanthanum hexaboride is as a coating deposited by physical vapor deposition of hot LaB₆ filament, or to manufacture hot cathodes made of LaB₆ single crystals. It is also used as a size/strain standard in X-ray powder diffraction to calibrate instrumental broadening of diffraction peaks.



LaB₆ Powder Specifications

Product	Lanthanum Hexaboride	Structure	Polycrystalline
Symbol	LaB ₆ cathode	Thermal Conductive	47 W/mK (20°C)
Cas No.	12008-21-8	Thermal Expansion	6.2

			10-6K-1 (20-900°C)
Atomic Mass	203.78 g/mol	Electrical Resistance	ca. 15 $\mu\Omega$ cm (20°C)
Density	4.72 g/cm ³	Electrical Conductive	6.65×10 ⁴ S/cm (20°C)
Melting Point	2528 K	Current Density	150 A/cm ² (1950°C)
Hardness	87.5 RA	Electron Emissivity	2.6 eV
Flexure Strength (σ)	200 Mpa	Fracture toughness (K _{IC})	3.0 MN/m ^{3/2}