

## Sinter Grade Boron Carbide B4C



You are welcomed to come to our factory to buy the latest selling, low price, and high-quality Nextgen Sinter Grade Boron Carbide B4C. Sinter Grade Boron Carbide Powder is specially sized to aid in the manufacturing of sintered ceramic parts. Nextgen Advanced Materials supplies Sinter Grade Boron Carbide Powder with high quality and fast delivery. The customization is also available.

### Product Description

You can rest assured to buy customized Nextgen Sinter Grade Boron Carbide B4C from us. Wide range of products, favored by customers all over the world. Among them, the European and American markets occupy a dominant position, which can reach more than 90%. Sinter Grade Boron Carbide Powders are specially sized to aid in the manufacturing of sintered ceramic parts. They are typically fine powders with an average particle size of fewer than 10 microns and a specially tailored size distribution.



### Sinter Grade Boron Carbide B4C Specifications

Properties	Units	Value
<b>Physical</b>		
Chemical Formula	–	B4C
Density, r	g/cm <sup>3</sup>	2.51
Color	–	black or dark gray
Crystal Structure	–	hexagonal
Water Absorption	% @R.T.	ng
Hardness	Vickers @ R.T. (GPa)	36

Hardness	knoop (kg/mm <sup>2</sup> )	ng
<b>Mechanical</b>		
Compressive Strength	GPa @ R.T.	2.9
Tensile Strength	MPa@980pC	155
Modulus of Elasticity (Young's Mod.)	GPa@ R.T	445
Flexural Strength (MOR)	MPa @ R.T.	375
Poisson's Ratio, u	@R.T.	0.19
Fracture Toughness, K <sub>Ic</sub>	MPa x m <sup>1/2</sup>	ng
<b>Thermal</b>		
Max. Use Temperature (* denotes inert atm.)	°C	2450
Thermal Shock Resistance	DT (°C)	ng
Thermal Conductivity	W/m-K @ R.T.	28
Coefficient of Linear Thermal Expansion, α <sub>l</sub>	10 <sup>-6</sup> K <sup>-1</sup> (~25°C through ±1000°C)	5.54
Specific Heat, cp	J kg <sup>-1</sup> K <sup>-1</sup> @ R.T.	945
<b>Electrical</b>		
Dielectric Constant	1MHz @ R.T.	ng
Dielectric Strength	kV/mm	ng
Electrical Resistivity	Wcm @ R.T.	ng