



**GNP Ceramics, LLC**

## Technical Data

### Boron Carbide - Microgrits

#### Typical Chemistry

Boron Carbide(B4C):	98.3%
Total Boron (B):	78.07%
Total Carbon (C):	20.55%
Iron Oxide (Fe2O3):	0.07%
Soluble B2O3	0.07%

#### Physical Characteristics

Color:	Black
Crystal Form:	Rhombohedral
True Density:	2.52 g/cm <sup>3</sup>
Melting Point:	2350°C
Hardness:	Knoop (100) 2800; Mohs 9.3+

#### Test Methods and available sizes

Sizing: FEPA F Standard 42-2:2006  
325/F  
Custom Sizes

Size	d3% max	d50%	d94% min
240	70	42.5-46.5	28
280	59	35.0-38.0	22
320	49	27.7-30.7	16.5
360	40	21.3-24.3	12
400	32	16.3-18.3	8
500	25	11.8-13.8	5
600	19	8.3-10.3	3
800	14	5.5-7.5	2
100	10	3.7-5.3	1
1200	7	2.5-3.5	1* (80%)

#### *Boron Carbide - Microgrits*

#### Description:

*Boron Carbide is produced by the carbothermal reduction of B2O3 in an electric arc furnace. The resulting ceramic product is one of the hardest materials available behind cubic boron nitride and diamond.*

#### Applications:

*GNP Ceramic's Boron Carbide microgrits can be used in a variety of applications such as: wire saw slicing of sapphire, neutron absorption, armor and armor tiles, blasting nozzles, refractory additive, sintering aid, and various ceramic pieces.*

#### Contact us:

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#### **Manufacturers and Distributors of Premium Ceramic Materials**

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