

General Properties

BNP-5 is a suitable material for the most severe refractory applications. It exhibits high strength up to 1400 °C and is unparalleled in resistance to thermal shock.

Applications

- Crucibles.
- Refractories.
- High-temperature electrical insulators and supports.

Physical Properties

Property	Unit	BNP-5
Maximum Use Temperature	°C	1400 (inert) 850 (air)
Volume Resistivity	at RT	6,4x10 ¹⁴ para 2,9x10 ¹⁵ perp
	at 150 °C	8,5x10 ¹³ para 2,4x10 ¹³ perp
Surface Resistivity	at RT	4,2x10 ¹⁶
	at 150 °C	1,5x10 ¹⁵
Dielectric Strength (tested up to 25 kV)	10 mil thick	1690 para 66535 perp
	25 mil thick	>1000 para >39370 perp
Dielectric Constant (@ 1MHz)	at RT	4,48 para 3,89 perp
Microwave Frequency (8.8 GHz)	at RT	3,89 para 4,28 perp
Dissipation Factor (Loss Tangent)	1 MHz at RT	0,0061 para 0,0017 perp
	1 MHz at 150 °C	0,0094 para 0,0062 perp
	8.8 GHz at RT	0,0039 para 0,0006 perp
Loss Factor	1 MHz at RT	0,0076 para 0,0230 perp
	1 MHz at 150 °C	0,0440 para 0,0250 perp
	8.8 GHz at RT	0,0150 para 0,0260 perp
BN	%	60
SiO ₂	%	40

NOTE: This data shows typical values and does not represent a specification.

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