

General Properties

Crystalline Phase	BN-40% SiO ₂ 60%
Binder Phase / Binder Type	SiO ₂
Colour	White
Typical Applications	Extreme Thermal Conductivity, Moisture Resistance, Dielectric Strength
Directionality	Parallel / Perpendicular

Mechanical Properties

Flexural Strength	103 / 76
Young Modulus	94 / 106
RT Compression	317 / 289
Open Porosity	6.88
Density (g/cc mm²)	2.3
Hardness-Knoop (KG/mm²)	N/A

Thermal Properties

Thermal Conductivity @25°C W/mK	12-14
Coefficient Thermal Expansion (10⁻⁶)	25 – 400°C 1.5 / 0.2 400 – 800°C 1.2 / 0.4 800 – 1200°C 1.2 / 0.4 1200 – 1600°C N/A 1600 – 1900°C N/A
Specific Heat @ 25°C J/gK	0.76
Max Temperature @ Oxidising / Inert	1000°C +

Electrical Properties

Dielectric Constant @ 1 MHz	3.4 / 3 3.7
Dissipation Factor @ 1 MHz	3.0E-03 / 3.1E-03
Dielectric Strength	>10
RT Resistivity (Ohm cm)	>10 ¹⁴ >10 ¹⁴