

General Properties

BNP6 is a high purity, hot pressed ceramic composite. This advanced material has excellent thermal shock resistance and very low thermo cycling behaviour combined with low thermal expansion. BNP6 is an electrical insulator with a high dielectric strength and is therefore an appropriate material for corona-related applications



Applications

- Aerospace
- Plasma
- Extreme environments
- PVD: constraint of Plasma arcs
- Extreme corrosion and wear resistance



Physical Properties

Property	Unit	BNP6
Density	g/cm ³	2.1
CTE, RT to 1000 °C (para)	10 ⁻⁶ k ⁻¹	<2.5
CTE, RT to 1000 °C (perp)	10 ⁻⁶ k ⁻¹	<2.0
Flexural Strength (para)	MPa @25 °C	>50
Flexural Strength (perp)	MPa @25 °C	>50
Young Modulus (para)	GPa	35
Young Modulus (perp)	GPa	45
Dielectric Strength	kV/mm	>125
BN	%	43
SiO ₂	%	53
B ₂ O ₃	%	<0.5

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

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