

ZIRCONIA CERAMIC MATERIAL TECHNICAL DATA

Operating Limits	Units	Zirconia Ceramics
Alumina Content	wt%	≥ 94
Volume Density	G /CM ³	6.00
Hardness (HRA)	HRA \geq	90
Compressive Strength	MPa \geq	≥ 1000
Maximum Temperature	°C	1300
Air Tight Test		Pass
Thermal Shock Test		Pass
Coefficient Of Heat Expansion	$\times 10^{-6}/^{\circ}\text{C}$	10.0
Dielectric Constant	$\epsilon_r 20^{\circ}\text{C}, 1\text{MHz}$	28
Dielectric Loss	$\tan\delta \times 10^{-4}, 1\text{MHz}$	10
Volume Resistivity	$\Omega \cdot \text{cm } 20^{\circ}\text{C}$	10^{13}
Puncture Strength	KV/mm , DC \geq	20
Acid-resistance	$\text{mg}/\text{cm}^2 \leq$	2.0
Alkali-resistant	$\text{mg}/\text{cm}^2 \leq$	0.08
Abrasion Resistance	$\text{g}/\text{cm}^2 \leq$	0.05
Compressive Strength	M Pa \geq	2300
Flexural Strength	M Pa \geq	600
Elastic Modulus	G Pa	200
Poisson's Ratio		0.20
Thermal Conductivity	W/m·K(20°C)	2.2