

Mg PSZ Zirconia Typical Physical Properties

Physical Property	Units	Typical Value
Content of Zirconium Oxide	%	96.5
Content of Magnesium Oxide	%	3.5
Density	g/cc	5.74
Grain Size	μm	40
Fracture Toughness	MPam ^{1/2}	10
Modulus of Elasticity	GPa	205
Flexural Strength	MPa	820
Hardness (Vickers)	HV 1	1120
Poisson Ratio		0.31
Compressive Strength	MPa	1990
Thermal Conductivity	W/mK	2.5
Coefficient of Thermal Expansion 20 - 1000°C	1 x 10 ⁻⁶ /°C	10.2
Volume Resistivity	Ω-cm	>10 ¹¹

All properties are at room temperature (20°C) unless otherwise stated.