

Material	Zirconium Oxide(ZrO ₂)	
	Zirconia toughened alumina (ZTA)	Zirconia
Density (g/cm ³)	≥4.1	6
Flexure strength (MPa)	700	900
Young Modulus (GPa)	330	200
Poisson's ratio	0.25	0.3
Compressive strength (MPa)	2300	2100
Hardness (HV)	1200	1250
Fracture toughness (MPa*m ^{1/2})	7	7.5
Maximum working temperature (°C)	1200	1000
Thermal conductivity (W/m*K)	18	3
Thermal expansion coefficient (1/°C)	8*10 ⁻⁶	1*10 ⁻⁵
Thermal shock resistance (ΔT °C)	250	400

* The actual product may have slight differences due to factors such as the composition of the raw material, molding and sintering process, etc.