

YTZP Zirconia Typical Physical Properties

Physical Property	Units	Typical Value
Color		White
Density	g/cc	6.05
Thermal Conductivity @ 20°C	W/mK	3.0
Flexural Strength (4 Pt Bend)	MPa	1000
Fracture Toughness	MPa-m ^{1/2}	8
Coefficient of Thermal Expansion 20 - 400°C	1 x 10 ⁻⁶ /°C	9
Hardness HV _{0.3} kg/mm ²	45N	1250
Modulus of Elasticity	GPa	205
Electrical Resistivity	Ω cm	> 10 ¹¹
Average Grain Size	μm	0.4

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