TECHNICAL DATA SHEET

Precision High performance Ceramic

General notes:

- **Partially stabilized zirconia (PSZ)**
- both hard and fracture tough
- fine grain size: excellent surface finish and able to hold sharp edge
- relatively low density
- no open porosity
- good abrasion and wear resistance
- superior flexural strength and fracture toughness
- good thermal properties and good temperature stability
- extreme corrosion resistance, nearly chemically inert
- electrically insulative until 400-500°C

Mechanical properties

Flexural modulus	**200 GPa**
Flexural strength	**1200 MPa**
Vickers Hardness	**12 GPa**

Thermal properties

Thermal conductivity	**2.0 W/m K**
Coef. of lin. therm expansionl:	**10.0 E-6/K**
Max working temperature	**1200°C**

Electrical properties

Volume resistivity	**>10^{12} Ohm cm**

Other properties

Density	**6.00 g/ccm**
Open porosity	**0.0%**
Water absorption	**0.0%**
Color	**white**

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