

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 expansion:	10.0 E-6/K
Max working temperature	1200°C
Shock resistance, behaviour	Good

Electrical properties

Volume resistivity	>10¹² Ohm·cm
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Other properties

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

This document contains information based on average values as obtained from the results of laboratory tests and observations made on the material. Ideal-Tek SA declines all responsibility from an improper use of the product described in this document.