



Ceramic Material Properties

OXIDES

NON-OXIDES

Aluminas

Zirconias

Carbides

Nitrides

Table with columns for PROPERTIES*, UNITS, TEST, PORCELAIN, STEATITE, CORDIERITE, MULLITE, AD-85, AD-90, AD-94, AD-96, FG-995, AD-995, PLASMAPURE™ ALUMINA AD-998, PLASMAPURE-UC™ ALUMINA, ESD ALUMINA, ZTA 10%, DURA Z™ (TTZ), YTZP (SINTERED), YTZP (HIPED), SC-RB (SC 2), ULTRASIC™ (SC 30), PURESIC®, RBB4C, HPB4C, WC (ACI-Ni6), HP AlN, SN 101C, NBD-200, NT 154, and STEEL. Rows include Density, Crystal Size, Water Absorption, Gas Permeability, Color, Flexural Strength (MOR), Elastic Modulus, Poisson's Ratio, Compressive Strength, Hardness, Tensile Strength, Fracture Toughness, Thermal Conductivity, Coefficient of Thermal Expansion, Specific Heat, Thermal Shock Resistance, Dielectric Strength, Dielectric Constant, Dielectric Loss (tan delta), and Volume Resistivity.

Notes:
1 Thermal Shock Resistance - Tests are run by quenching samples into water from various elevated temperatures. The change in temperature where a sharp decrease in flexural strength is observed is listed as DTC.
2 Four point bend modulus of rupture
3 100 gm load
4 PureSic available in low, mid, and high resistivity

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*The chart is intended to illustrate typical properties. Property values vary with method of manufacture, size, and shape of part. Data contained herein is not to be construed as absolute and does not constitute a representation or warranty for which CoorsTek assumes legal responsibility. Close control of values of most properties can be maintained if specified.