

Patent™ Y-TZP Zirkonoxid

Technical Data

Physical Properties

 Test method (Norm)	 Property	 Values
ISO 13356	Density	6,05 [g/cm ³]
ISO 13356	Microstructure: Grain Size	0,35 [µm]
ISO 6872	Biaxial Bending Strength	1400 [MPa]
ISO 13356	Cycl. Fatigue	Successful, no failure
ISO 13356	Radioactivity	15 [Bq/kg]
ISO 6872	CTE	10 [10 ⁻⁶ K ⁻¹]
ISO 6872	Chem. Solubility	12 [µg/cm ²]
ISO 13356	Young's Modulus	205 [GPa]
ISO 13356	Hardness	1300 [HV0,5]

Chemical composition

 Test method (Norm)	 Elements – Oxides	 Values
ISO 13356	ZrO ₂ + HfO ₂ + Y ₂ O ₃	99,70 %
ISO 13356	Y ₂ O ₃	5,50 %
ISO 13356	HfO ₂	1,90 %
ISO 13356	Al ₂ O ₃	0,25 %
ISO 13356	Other oxides	≤ 0,50 %