

Zirconia Mg-PSZ

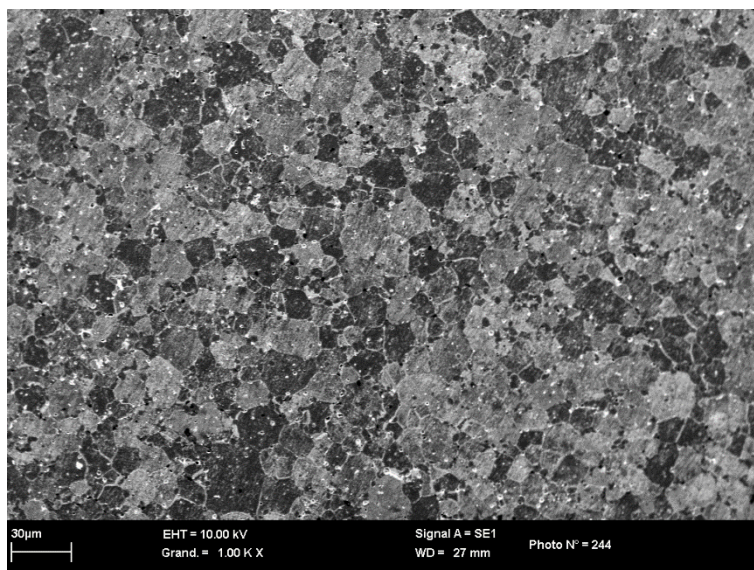
CHEMICAL COMPOSITION	ZrO ₂	94%wt	* by difference
	HfO ₂	<2%wt	
	MgO	3.65%wt	
	Al ₂ O ₃	0.02%wt	
	SiO ₂	0.2%wt	
	Fe ₂ O ₃	0.09	

PHYSICAL PROPERTIES	Mean grain size	20±5 µm
	Sintered density	5.74 g/cm ³
	Bending strength at 20° C	400 MPa
	Hardness H _{v0.5}	1200 Hv

THERMAL PROPERTIES	Thermal conductivity at 20°C	3 W.m ⁻¹ .k ⁻¹
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ELECTRICAL PROPERTIES	Dielectric constant at 25°C-1MHz	27 (1MHz)
	tan δ	2.10 ⁻³ (1GHz)
	DC Volume resistivity at 25°C	5.10 ¹² Ω.cm
	Dielectric strength at 3mm	19 kV/mm ⁻¹

MICROSTRUCTURE



KEY FEATURES	Good wear and mechanical properties
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TYPICAL APPLICATIONS	Textile yarn guides, wear and corrosion in applications requiring thermal shock resistance, tooling in metal forming, guide rollers for welded tube production.
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