

YTTRIA ZIRCONIA YZ01 - 3 mol %

- A powder perfectly homogeneous.
- Outstanding mechanical properties.

TYPICAL CHEMICAL ANALYSIS

ZrO ₂ +HfO ₂ *	Al ₂ O ₃	SiO ₂	Na ₂ O	TiO ₂	Fe ₂ O ₃	CaO	Y ₂ O ₃	H ₂ O (105°C)	L.O.I. (105°C - 1000°C)
≥ 99%	0.20%	0.07%	0.03%	0.05%	0.04%	0.05%	5.20%	0.10%	1.00%

* by difference

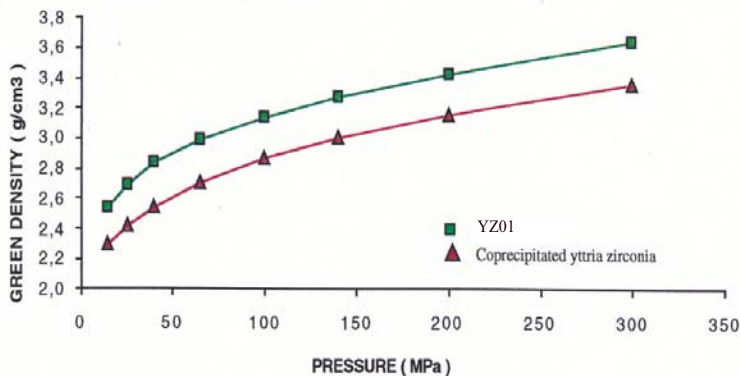
PARTICLE SIZE DISTRIBUTION

D10	0.2 µm
D50 (median diameter)	0.6 µm
D90	1.2 µm

Analytical method: Sedigraph 5100

CRYSTAL STRUCTURE _____ Tetragonal

PHYSICAL PROPERTIES



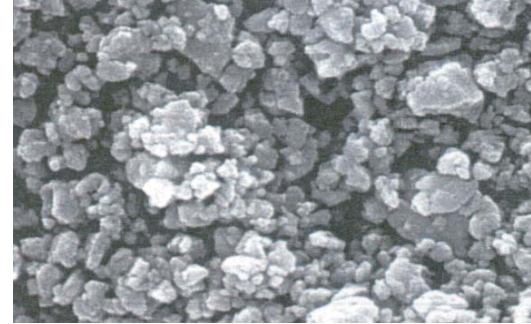
Specific gravity	6.05 g/cm ³
Loose bulk density	0.9 g/cm ³
Specific surface area	7.0 m ² /g
Modulus of rupture (4 points bending)	750 to 950 Mpa
Vickers hardness (HV)	12000 to 14000 Mpa
Toughness (K _{1C}) - indentation strength	9 to 11 MPa x m ^{1/2}

Method: B.E.T. - Shaping by isostatic pressing and sintering at 1500 °C.

SAFETY DATA SHEET _____ DS MS ZR 16

PACKAGING

25 kg multiwalled moisture proof paper bags.



MAIN APPLICATIONS

- Structural ceramics
- Ferules

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