

## **MATERIAL DATA SHEET**

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## Material type: fused stabilized Zirconia (ZrO<sub>2</sub>)

## **ZR25**

Properties		Unit	Specific value
Main component		-	ZrO <sub>2</sub> + MgO
Purity		wt%	> 99
Density		g / cm <sup>3</sup>	> 4.30
Open porosity		vol%	ca. 24
Bending strength $\sigma_{m}$		MPa	80
Thermal shock resistance		-	very good
Maximum application temperature		°C	2200
Coefficient of thermal expansion	20 - 500 °C	10 <sup>-6</sup> / K	7.22
	20 - 1000 °C	$10^{-6} / K$	4.51
Thermal conductivity	30 °C 1000 °C	W / (m * K) W / (m * K)	0.9 1.9
Specific heat	20 °C	J / (kg * K)	770
Typical colour		-	sahara

The data indicated on this table are in line with the introductory German Industrial Standard DIN 60672-2 and relate to test specimens from which they are obtained. They are not unconditionally applicable to other forms of the same material. The data must be regarded as indicative only. All data refer to a temperature of 20 °C, unless otherwise specified.