



Zirconia

PROPERTIES		MASS UNIT	ZR-G
CERAMIC TYPE	Colour Type according to DIN VDE 0335		white
CHEMICAL	ZrO ₂ / Y ₂ O ₃	Weight %	92/8
PHYSIKALISCH	Melting point open pores Technical density Theoretical density Crystal size	°C Vol.% g/cm ³ g/cm ³ µm	> 2400 0 5,8 6,0 ca. 5
THERMAL	Expansion coefficient linear (20 - 1.000°C) Max. Working temperature Thermal conductivity at 100°C <u>Thermal Shock Resistance</u> <u>Is not suitable for inductive heating</u> <u>medium</u>	10 ⁻⁶ • °C ⁻¹ °C W • m ⁻¹ • °C ⁻¹	10,3 2000 2,2 <i>bad</i>
MECHANICAL	Hardness (knopp 1000g) Hardness (Rockwell) Flexural Strength (3 point support at 20°C) Modulus of elasticity K1C Hardness at 20°C Wear resistance according to ASTM C704-76a cm ³	G Pa R45N MPa GPa MPa • m ^{1/2} cm ³	12,7 83 900 200 13
ELECTRICAL	Electrical resistance at 20°C at 500°C at 1.000°C	Ohm • cm Ohm • cm Ohm • cm	> 10 ¹³ 10 ³ < 10 ¹

All data given are to be regarded as guidelines.