

Quality: ZR-G

Cast zirconium oxide (dense)

Optical	Colour		white
Chemical	ZrO ₂ / Y ₂ O ₃	Weight %	92 / 8
Physical	Melting point	°C	> 2400
	Open pores	Vol. %	0
	Technical density	g / cm ³	5,8
	Theoretical density	g / cm ³	6,0
	Crystal size	µm	approx. 5
Thermal	Linear expansion coefficient (20 - 1000 °C)	10 ⁻⁶ / °C ⁻¹	10,3
	Maximum working temperature	°C	2000
	Thermal conductivity at 100 °C	W / m ⁻¹ / °C ⁻¹	2,2
	Thermal shock resistance <i>Is not suitable for inductive heating</i>		moderate - poor
Mechanical	Hardness (Knopp 1000 g)		12,7
	Hardness (Rockwell)	R45N	83
	Flexural strength (3 Point support at 20 °C)	MPa	900
	Modulus of elasticity	GPa	200
	K _{1C} Hardness at 20 °C	MPa / m ^{1/2}	13
Elektrical	Electrical resistance		
	at 20 °C	Ohm / cm	> 10 ¹³
	at 500 °C	Ohm / cm	10 ³
	at 1000 °C	Ohm / cm	< 10 ¹

All data given are to be regarded as guide values!