



TECHNICAL DATA SHEET OF DURALOX 997 ALUMINA CERAMIC (C799)

	PROPERTIES	VALUE
CHEM.	Al ₂ O ₃	99.7 %
	MgO	0.20 %
	Others	0.10 %
PHYSICAL	Colour	Light Cream
	Surface Finish	Smooth
	Density	3.90 ± 0.05 g/cm ³
	Bulk Density	2.35 ± 0.05 kg/ltr
	Porosity	Nil
	Water Absorption	Nil
	Hardness on Moh's Scale	9+
	Hardness on Vicker's Scale	1650 - 1700 Hv ₅
	Flexural Strength 3 P.B. (@ Room Temperature)	380 MPa
	Compressive Strength (@ Room Temperature)	3300 MPa
	Young's Modulus	350 GPa
	Crushing Strength (@ Room Temperature : Ø 1.5mm Bead)	65 - 75 kgf
	Bead Sphericity 90%	≥0.95
	% Cumulative Weight Loss / Hr (Wear Test Conducted in a Jar Mill with Water & Silica sand. Media Size Ø 20 mm)	
	After 24 Hrs.	0.011
	After 96 Hrs.	0.0063
THERMAL	Coefficient of Linear Thermal Expansion (Room Temperature to 1000 °C)	8.4 x 10 ⁻⁶ / °C
	Thermal Conductivity (@ Room Temperature)	28 W/mK
	Max Temperature of Use (No Load Condition)	< 1750 °C (3182 °F)
ELECTRICAL	Dielectric Strength (@ Room Temperature)	20 kV/mm
	Dielectric Constant (@ Room Temperature @ 1 MHz)	9.5
	Dissipation Factor (@ Room Temperature @ 1 MHz)	0.0002
	Volume Resistivity (@ Room Temperature)	>10 ¹⁴ Ω.cm

Kindly note that all values mentioned are based on test pieces and may vary according to component design and manufacturing process. The values are not guaranteed by Jyoti Ceramic Ind. in anyway whatsoever and should be treated as indicative only. All values refer to a testing temperature of 20 °C, unless otherwise specified.



Contact us :

JYOTI CERAMIC INDUSTRIES PVT. LTD.



www.jyoticeramic.com

C-21, N.I.C.E, Satpur, Nashik - 422 007, Maharashtra, India.

Tel.: +91 (0) 253 26918111, 2350120 / 338 / 729 • E-mail: info@jyoticeramic.com