

PROPERTIES OF HIGH ALUMINA PRODUCTS

S.No.	PROPERTIES	VALUE/RESULTS
1.	Density	3.922 gm/cc
2.	Water Absorption	NIL
3.	Color	Ivory
4.	Flexural Strength (MOR)	493.4 MPa
5.	Hardness (Moh's Scale)	+9
6.	Hardness (Rockwell Scale)	84
7.	Coefficient of Thermal Expansion (30°C–1000°C)	8.21 (1 x 10 ⁻⁶ /°C
8.	Maximum Use Temperature	1750°C
9.	Chemical Resistance with Conc. H ₂ SO ₄ at 100°C (4 Hrs)	0.0008 %
10.	Chemical Resistance with 10% NaOH at 100°C (4 Hrs)	0.0003 %
11.	Chemical Resistance with H ₃ PO ₄ at 90°C (4Hrs)	0.002%
12.	CHEMICAL ANALYSIS	
	Al ₂ O ₃	99.71 %
	SiO ₂	0.04 %
	Fe ₂ O ₃	0.05 %
	TiO ₂	Trace
	CaO	0.05 %
	MgO	0.06 %
	Na ₂ O	0.05 %
	K ₂ O	Trace
	L.O.I.	0.02 %
	TOTAL	99.98 %