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TDS - Grey Firebricks

1. Chemical Composition

Na ₂ O	MgO	Al ₂ O ₃	SiO ₂	SO ₃	K ₂ O	CaO	TiO ₂	MnO	Fe ₂ O ₃	NiO	CuO
0,5	1,2	11,7	45,4	1,8	2,9	18,0	0,7	8,8	8,1	0,6	0,5

2. Physical & Mechanical Properties

Apparent Density:	2.03 g/cm ³
Real Density:	2.82 g/cm ³
Open Porosity:	27.82 % p.v.
Water Absorption:	13.67 % p.w.
Cold Crushing Strength	38.29 Mpa
Flexural Strength (M.O.R)	9.45 Mpa

3. Thermal Properties

Refractoriness:	>1100°C
Permanent Linear Change:	<1%
Thermal Conductivity @ 200°C:	1.16 W/m·K
Thermal Conductivity @ 400°C:	1.05 W/m·K
Heat Capacity:	0.75 J/g·K
Thermal Diffusivity @ 200°C	7.6·10 ⁻⁷ m/s
Thermal Diffusivity @ 300°C	6.9·10 ⁻⁷ m/s