



alumina

FEATURES

- Wear resistant
- Corrosion-proof
- Good mechanical strength
- Good insulation properties
- High temperature resistant

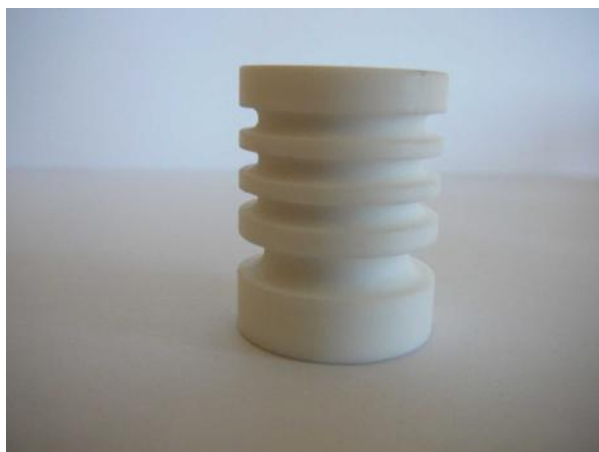
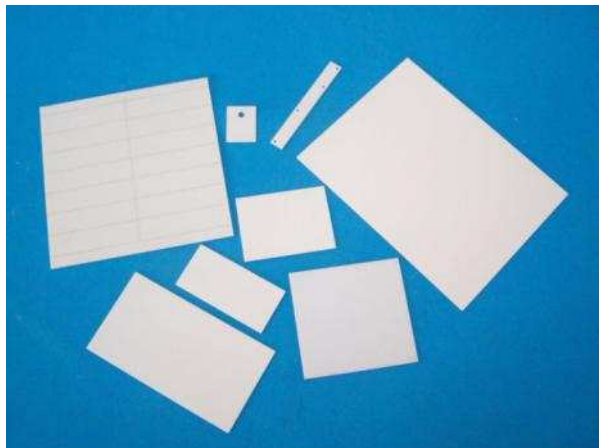


QUALITY GRADE		Steatite	A95%	A99%	A99,9%
PHYSICAL PROPERTIES					
Porosity	%	0	0	0	0
Density	g/cm ³	2,8	>3,65	>3,9	3,95
Hardness	HRA	--	82	85	85
Hardness Vickers	HV0,5	--	1800	1900	2000
Flexural Strength	MPa	≥150	≥270	≥380	≥300
Compressive Strength	MPa	900	1.330	2.900	3.200
Tensile Strength at 25 °C	MPa	--	105	238	238
THERMAL PROPERTIES					
Thermal Expansion Coeff.	10 ⁻⁶ /°C	<9	<6,2	<8	<8
Thermal Conductivity at 25 °C	W/m.K	2,5	18	35,6	35,6
Safe Use Temperature	°C	1.200	1.450	1.600	1.650
ELECTRICAL PROPERTIES					
Dielectric Constant at 25 °C	1 MH 20 °C	2,28	≤9	≤9,2~11	≤9,2~11
Volume Resistance at 25°C	Ωcm ² /cm	≥10 ¹³	≥10 ¹⁴	≥10 ¹⁴	≥10 ¹⁵
Dielectric Strength	KV/mm	≥20	≥20	≥25	≥29
COMPOSITION					
Al ₂ O ₃	%	95	95	>99	99,9
SiO ₂	%	2	2	0,3	0
CaO ₂	%	3	3	0,3	0

NOTA: These properties are typical average value and are for general guidance only, not compromising the Carbosystem company.



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ceramic

FEATURES

- Wear resistant
- Corrosion-proof
- Good mechanical strength
- Good thermal shock
- Low thermal expansion



QUALITY GRADE		CORDIERITE	MULLITE 1	MULLITE 2	CORUNDUM
PHYSICAL PROPERTIES					
Density	g/cm ³	2,1	2,0	1,78	3,47
Porosity	%	17 - 20	23	26	16
Flexural Strength	Mpa	13 -17	13 - 15	6 - 8	--
Compressive Strength	Mpa	--	16 - 20	12 -14	115
Thermal Expansion Coeff.	10 ⁻⁶ /°C	3,0	2,5	2,4	--
Thermal Shock Resistance		Good	Good	Very Good	Normal
Safe Use Temperature	°C	≤ 1.360	≤ 1.280	≤ 1.260	≤ 1.750
COMPOSITION					
Al ₂ O ₃	%	38	47	42	42
SiO ₂	%	51	44	49	49
MgO	%	8	6,2	7	7



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ceramic

