

STEATITE SPECIFICATIONS

STEATITE C220		
FEATURE	VALUE	UNIT OF MEASUREMENT
MECHANICAL PROPERTIES		
Chemical impurities	Alkali Free	-
Colour	Off white	-
Specific gravity	2.75	g/cm ³ [Mg · m ³]
Water absorption	0.00	%
Compressive strength	5 000 (500)	kG/cm ² (MPa)
Flexural strength	1 400 (140)	kG/cm ² (MPa)
Young's modulus	1.00	kG/cm ² · 10 ³ (MPa · 10 ²)
Hardness	7 + 8	Mohs - Scale
THERMAL PROPERTIES		
Coeff. of thermal expansion	8-9 x 10 ⁻⁶	1/°C
Resistance to thermal shock (down shock ΔT)	200	°C
Thermal conductivity (20 °C)	2.3 + 2.5	W / m · °C
Safe operating temperature	1 050	°C
Max. withstanding temp.	1 250	°C
ELECTRICAL PROPERTIES		
Dielectric strength	15 + 18	kV / mm
Withstand voltage	> 30	kV
Surface resistivity min.	10 ¹⁰	Ω
Volume resistivity (20°C)	10 ¹³	Ω · cm
CHEMICAL COMPOSITION		
SiO ₂	58-60	%
Al ₂ O ₃	6 - 8	%
Fe ₂ O ₃	< 1	%
TiO ₂	< 1	%
CaO	< 1	%
MgO	26 + 28	%
Na ₂ O	< 1	%
K ₂ O	< 1	%
BaO	2 + 3	%