

## China-Yixing Longly Refractories Steatite Ceramics (High Frequency Porcelain)

Category : Ceramic , Oxide , Magnesium Oxide , Silicon Oxide

### Material Notes:

LONGLY's steatite ceramics (namely high frequency porcelain, strengthened porcelain, magnesia porcelain), molecular formula as MgO-SiO<sub>2</sub>, is pure white. Steatite is the appropriate option when good mechanical properties and electrical resistance are needed, and is one of insulating materials with relatively good strength that operates safely at temperatures up to 1200°C. It has strong acid resistance, insulation property and absorbability, and is a kind of ceramic for mounting purposes, which can be used as coil skeleton, mounting panel, bracket, various high frequency insulator, band switch porcelain axis, porcelain bushing, seal housing, resistor cores and casings and so on in the electronic products. Steatite ceramics (high frequency porcelain) has high heat insulation performance, good chemical stability, high pressure resistance and stability of electric properties with temperature and frequency variation. Information Provided by China Yixing Longly Refractories Co. Ltd

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_China-Yixing-Longly-Refractories-Steatite-Ceramics-High-Frequency-Porcelain.php](http://www.lookpolymers.com/polymer_China-Yixing-Longly-Refractories-Steatite-Ceramics-High-Frequency-Porcelain.php)

Physical Properties	Metric	English	Comments
Bulk Density	2.80 - 3.10 g/cc	0.101 - 0.112 lb/in <sup>3</sup>	
Water Absorption	<= 0.00 %	<= 0.00 %	

Mechanical Properties	Metric	English	Comments
Hardness, Mohs	8.5	8.5	
Flexural Strength	>= 280 MPa	>= 40600 psi	cold bending
Compressive Strength	>= 260 MPa	>= 37700 psi	Ambient

Thermal Properties	Metric	English	Comments
CTE, linear	6.50 - 7.10 μm/m-°C	3.61 - 3.94 μin/in-°F	
	@Temperature 20.0 - 1000 °C	@Temperature 68.0 - 1830 °F	
Thermal Conductivity	2.20 - 2.50 W/m-K	15.3 - 17.4 BTU-in/hr-ft <sup>2</sup> -°F	
	@Temperature 25.0 - 300 °C	@Temperature 77.0 - 572 °F	
Maximum Service Temperature, Air	>= 1200 °C	>= 2190 °F	

Component Elements Properties	Metric	English	Comments
Al <sub>2</sub> O <sub>3</sub>	2.0 - 5.0 %	2.0 - 5.0 %	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+8 - 1.00e+9 ohm-cm	1.00e+8 - 1.00e+9 ohm-cm	
	@Temperature 100 °C	@Temperature 212 °F	
	1.00e+10 - 1.00e+12 ohm-cm	1.00e+10 - 1.00e+12 ohm-cm	
	@Temperature 1000 °C	@Temperature 1830 °F	
Dielectric Strength	>= 20.0 kV/mm	>= 508 kV/in	
	15.0 - 25.0 kV/mm	381 - 635 kV/in	DC Breakdown Strength
	20.0 - 30.0 kV/mm	508 - 762 kV/in	Insulating Strength
Dielectric Loss Index	6.0 - 8.0	6.0 - 8.0	
	@Temperature 20.0 °C	@Temperature 68.0 °F	

Descriptive Properties	Value	Comments
Heat-resisting Impulse T(°C)	200	
MgO-SiO2 (%)	92-96	
Refractoriness (°C)	>1750	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China