

Mullite

Features

- High Mechanical Strength
- Low Thermal Expansion Coefficient
- Good Anti Thermal Shock Property

Applications

- Protecting Pipe for Thermocouple
- Insulating Pipe
- Insulator
- Lining

Characteristics of Material

Item	Unit	Value
Main Composition		$3\text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$
Bulk Density	g/cm^3	3.1
Mohs Hardness		6~7
Compressive Strength	MPa	1000
Tensile Strength	MPa	100
Bending Strength	MPa	180
Thermal Expansion Coefficient	$\times 10^{-6}/^\circ\text{C}$	4.0(at 25~300°C)
Thermal Conductivity	W/m.K	3.9~6.1
Dielectric Constant (at 1MHz)		6.5
Volume Resistivity	$\Omega \text{ cm}$	$> 10^{13}$