



Cordierite Ceramic Tube

Nextgen Cordierite ceramic tube, a type of magnesium aluminum silicate with particularly good thermal shock properties, is made of cordierite ceramic. Nextgen Advanced Materials supplies cordierite ceramic tube with high quality and fast delivery, and customized products are also available.

Product Description

You are welcomed to come to our factory to buy the latest selling, low price, and high-quality Nextgen Cordierite Ceramic Tube. We look forward to cooperating with you. Cordierite ceramic tube is made of cordierite ceramic. Cordierite ceramic is a type of magnesium aluminum silicate with particularly good thermal shock properties. Cordierite also has low thermal conductivity and thermal expansion, while also being cost-effective. It is often used as a structural ceramic for kiln furniture applications, and it also finds uses in other applications where rapid temperature changes take place.



Specifications:

Properties	Units	Test	Value
Physical			
Chemical Formula	–	–	2MgO-2Al ₂ O ₃ -5SiO ₂
Density, r	g/cm ³	ASTM C20	2.60
Color	–	–	off-white
Crystal Structure	–	–	orthorhombic
Water Absorption	% @R.T.	ASTM C373	0.02 – 3.2
Hardness	Moh's	–	7

Hardness	knoop (kg/mm ²)	Knoop 100g	—
Mechanical			
Compressive Strength	MPa @ R.T.	ASTM C773	350
Tensile Strength	MPa @ R.T.	ACMA Test #4	25.5
Modulus of Elasticity (Young's Mod.)	GPa	ASTM C848	70
Flexural Strength (MOR)	MPa @ R.T.	ASTM F417	117
Poisson's Ratio, ν	—	ASTM C818	0.21
Fracture Toughness, K_{Ic}	MPa x m ^{1/2}	Notched Beam Test	—
Thermal			
Max. Use Temperature (* denotes inert atm.)	°C	No load cond.	1371
Thermal Shock Resistance	DT (°C)	Quenching	500
Thermal Conductivity	W/m-K @ R.T.	ASTM C408	3.0
Coefficient of Linear Thermal Expansion, α_l	mm/m-°C (~25°C through ±1000°C)	ASTM C372	1.7
Specific Heat, c_p	cal/g-°C @ R.T.	ASTM C351	0.35
Electrical			
Dielectric Constant	1MHz @ R.T.	ASTM D150	4.7
Dielectric Strength	kV/mm	ASTM D116	5.11
Electrical Resistivity	Wcm @ R.T.	ASTM D1829	1014