

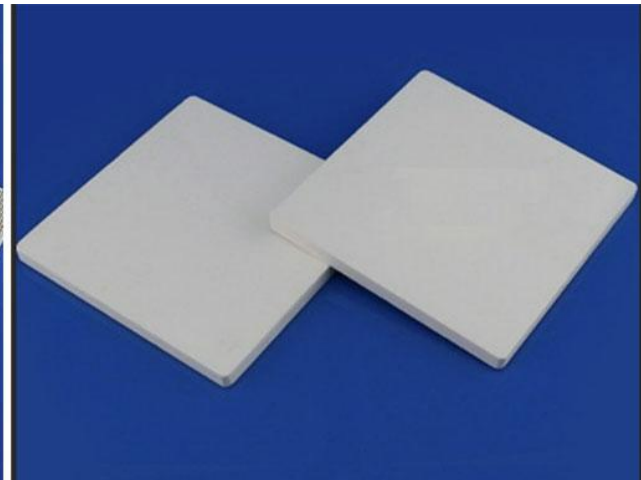
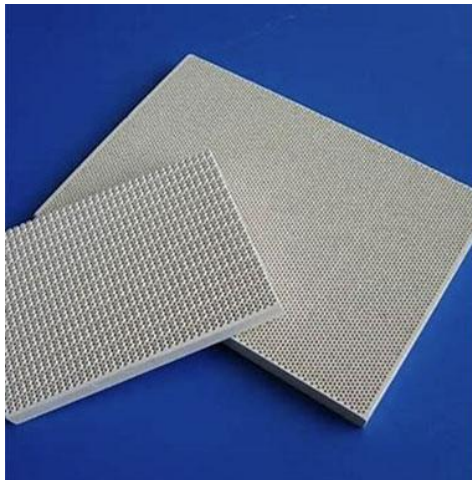


Cordierite Ceramic Plate

Nextgen Cordierite ceramic plate, made of silicate ceramic cordierite ($Mg_2Al_4Si_5O_{18}$), features the advantage of energy-efficiency and high-temperature resistance. Nextgen Advanced Materials supplies Cordierite ceramic plates with high quality and fast delivery, and customized products are also available.

Product Description

You can rest assured to buy customized Nextgen Cordierite Ceramic Plate from us. We look forward to cooperating with you, if you want to know more, you can consult us now, we will reply to you in time! Cordierite ceramic plate is made of silicate ceramic cordierite ($Mg_2Al_4Si_5O_{18}$). Cordierite is a commonly used structure ceramic material that has the advantage of energy-efficiency and high-temperature resistance. Cordierite plate is widely used on a barbecue grill, burn oven, convection oven, gas oven, rotary oven, natural gas heater, space heater crucible, and various heating equipment, etc.



Cordierite Plate Specifications

Properties	Units	Test	Value
Physical			
Chemical Formula	–	–	$2MgO \cdot 2Al_2O_3 \cdot 5SiO_2$
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, u	—	ASTM C818	0.21
Fracture Toughness, K _{1c}	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, cp	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