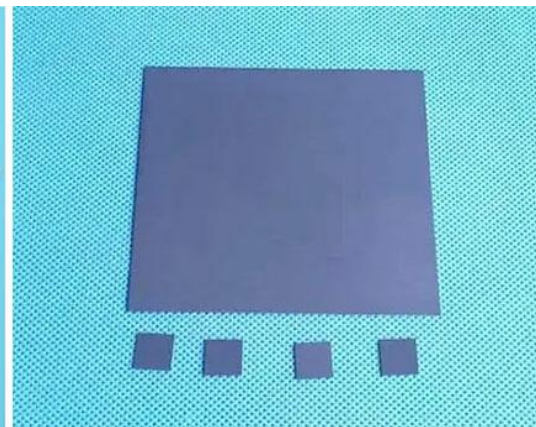


### Silicon Nitride Plate

Due to the even performance in high temperature, Si<sub>3</sub>N<sub>4</sub> is a commonly used ceramic material in the metallurgical industry. It has excellent thermal shock resistance due to the microstructure. Nextgen Advanced Materials supplies the Silicon Nitride Plate with high quality and fast delivery. Meanwhile, the customization is available.

### Product Description

Find a huge selection of Silicon Nitride Plate from US at Nextgen Advanced Materials INC. Provide professional after-sales service and the right price, looking forward to cooperation. Silicon nitride plate is an inorganic material ceramic that does not shrink during sintering. The strength of silicon nitride, especially hot-pressed silicon nitride, is one of the hardest substances in the world. Si<sub>3</sub>N<sub>4</sub> plate & sheet is a covalent bond compound with high strength, low density, and high-temperature resistance.



### Specification

Density	3.21 g/cm <sup>3</sup>
Compressive Strength	3000 MPa
Flexural Strength	800 MPa
Weibull-Modulus m	15
Fracture Toughness K <sub>Ic</sub>	6.5 MPa m <sup>1/2</sup>
Young's Modulus E	320 GPa
Poisson Ratio	0.28
Hardness Vickers (HV 1)	16 GPa
<b>Thermal Properties</b>	

Maximum Temperature (Inert Gas)	1200°C
Maximum Temperature (Air)	1100°C
Thermal Conductivity @ 20°C	28 W/mK
Thermal Conductivity @ 1000°C	16 W/mK
Thermal Expansion (20–100°C)	2*10 <sup>-6</sup> /K
Thermal Expansion (20–1000°C)	3.510 <sup>-6</sup> /K
Thermal Shock parameter R1	600 K
Thermal Shock parameter R2	15 W/mm
<b>Electrical Properties</b>	
Resistivity at 20°C	10 <sup>12</sup> Ωcm
Resistivity at 800°C	10 <sup>7</sup> Ωcm
Dielectric constant	6 MHz