

Silicon Nitride Ceramic Material Properties - SU0011

Properties	Unit	Value
Density	g/cm ³	3.2±0.05
Relative density	%	>99.5
Elastic Modulus	GPa	300~320
Crushing Load Ratio (25°C)	%	≥40
Hardness	(HRA)	91
Fracture Toughness	MPa·m ^{1/2}	6.0~7.0
Flexural Strength	MPa	600~700
Poisson's Ratio	-	0.25
Coefficient of Thermal Expansion	10 ⁻⁶ /K	2.3~3.2
Weibo Modulus	Gpa	10~12
Thermal Conductivity	-	15~20
Resistivity	W/(m·K)	10 ¹⁸
Acid and Alkali Corrosion Resistance	-	Excellent
Dimensional Stability	-	Excellent
Magnetism	-	None
Oxide Content	%	8

Remark: The value is just for review. Different working conditions may cause some difference.