

Silicon Nitride/Aluminum Nitride/Alumina Sheet

Formula: Sialon

Thickness: 4mm

Length 1: 50mm

Length 2: 50mm

UOM Code: 151-255-43

SKU: 1000051011-group

Product Code: SY60-SH-000210

Material Properties for Ceramics

Chemical Resistance

Element	Value
Acids - concentrated	Good
Acids - dilute	Good
Alkalis	Fair

Physical Properties

Element	Value
Apparent porosity(%)	0.01
Density(gcm ³)	3.24

Thermal Properties

Element	Value
Upper continuous use temperature(C)	1000
Specific heat(J K ⁻¹ kg ⁻¹)	620-710@25°C
Thermal conductivity(W m ⁻¹ K ⁻¹)	20@20°C
Coefficient of thermal expansion(x10 ⁻⁶ K ⁻¹)	3.3-3.7@20-1000°C

Mechanical Properties

Element	Value
Tensile modulus(GPa)	280-300
Hardness - Vickers(kgf mm ⁻²)	1650-1800

Element	Value
Tensile strength(MPa)	400-450

Pultrusions

Element	Value
Compressive strength(MPa)	>3500

Electrical Properties

Element	Value
Volume resistivity(Ohmcm)	10^{12} - 10^{17} @25