

Hot-pressed Silicon Carbide Granules

Formula: SiC

Nominal Granule Size: 1mm

Weight: 30g

UOM Code: 247-767-42

SKU: 1000105293-group

Product Code: SJ60-GL-000100

Material Properties for Ceramics

Chemical Resistance

Element	Value
Acids - concentrated	Good
Acids - dilute	Good
Alkalis	Good-Poor
Halogens	Good-Poor
Metals	Fair

Electrical Properties

Element	Value
Dielectric constant	40
Volume resistivity(Ohmcm)	10^3 - 10^7 @25

Physical Properties

Element	Value
Apparent porosity(%)	0
Density(gcm ³)	3.15

Thermal Properties

Element	Value
Melting point(C)	2650-2950
Upper continuous use temperature(C)	1500-1650
Specific heat(J K ⁻¹ kg ⁻¹)	670-710@25°C

Element	Value
Thermal conductivity(W m ⁻¹ K ⁻¹)	90-160@20°C
Coefficient of thermal expansion(x10 ⁻⁶ K ⁻¹)	4.5@20-1000°C

Mechanical Properties

Element	Value
Tensile modulus(GPa)	200-500
Hardness - Vickers(kgf mm ⁻²)	2400-2800
Shear strength(MPa)	210-380
Tensile strength(MPa)	400

Pultrusions

Element	Value
Compressive strength(MPa)	1000-1700