

RocCera

Alumatough

SiC Whiskers Reinforced Alumina

Typical Properties:

Chemical Composition		6 % SiC whiskers + alumina
Crystal Structure		α -Alumina + α -SiC
Density	gram/cc	3.9
Color		Dark Gray
Young's Modulus @ RT	psi X 10 ⁶	56
	GPa	385
Flexural Strength @ RT	Kpsi	66
	MPa	450
Fracture Toughness	MPa√m	4.5
Vicker's Hardness	500 g Load	1450 VHN
Weibull Modulus		7
Thermal Conductivity (RT)	W/m•K	26
Coeff. Of Linear Thermal Expansion (40 - 400 °C)		7.2x 10 ⁻⁶ /°C

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