

## COI Ceramics Nextel™ AS-N312 Oxide Ceramic Matrix Composite, Aluminosilicate

Category : Ceramic , Ceramic Matrix Composite , Oxide , Aluminum Oxide , Silicon Oxide

### Material Notes:

Description: Oxide ceramic matrix composites products are based upon sol-gel derived matrices and 3M Corporation's Nextel™ fiber products. These materials can be used up to 1200°C (2200°F) in air environments and are primarily used in both Aerospace and Gas Turbine applications. Ceramic Matrix System: Water Based Sol-Gel Processing, Versatile Matrix Chemistry Typical Applications for Oxide CMCs: Rotocraft Exhaust Systems, Advanced Thermal, Advanced Combustor Information from COI Ceramics, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_COI-Ceramics-Nextel-AS-N312-Oxide-Ceramic-Matrix-Composite-Aluminosilicate.php](http://www.lookpolymers.com/polymer_COI-Ceramics-Nextel-AS-N312-Oxide-Ceramic-Matrix-Composite-Aluminosilicate.php)

Physical Properties	Metric	English	Comments
Density	2.30 g/cc	0.0831 lb/in <sup>3</sup>	
Porosity	24 %	24 %	

Mechanical Properties	Metric	English	Comments
Tensile Strength	124 MPa	18000 psi	
Tensile Stress	34.5 MPa	5000 psi	
	@Strain 0.100 %	@Strain 0.100 %	
	68.9 MPa	10000 psi	
	@Strain 0.200 %	@Strain 0.200 %	
	96.5 MPa	14000 psi	
	@Strain 0.300 %	@Strain 0.300 %	
	117 MPa	17000 psi	
	@Strain 0.400 %	@Strain 0.400 %	
Tensile Modulus	31.0 GPa	4500 ksi	
Shear Strength	9.00 MPa	1310 psi	Short Beam

Thermal Properties	Metric	English	Comments
CTE, linear	4.80 μm/m-°C	2.67 μin/in-°F	
Maximum Service Temperature, Air	650 °C	1200 °F	

Descriptive Properties	Value	Comments
Nominal Fiber Volume (%)	48	

Descriptive Properties	Value	Comments
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## Contact Songhan Plastic Technology Co.,Ltd.

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