

## 3M Nextel™ BF-40 Woven Fabric 440

Category : Ceramic , Oxide , Aluminum Oxide

### Material Notes:

Information provided by 3M

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_3M-Nextel-BF-40-Woven-Fabric-440.php](http://www.lookpolymers.com/polymer_3M-Nextel-BF-40-Woven-Fabric-440.php)

Physical Properties	Metric	English	Comments
Density	3.05 g/cc	0.110 lb/in <sup>3</sup>	
Permeability	35	35	[ft <sup>3</sup> /min/ft <sup>2</sup> ], Air w/o sizing
Thickness	970 microns	38.2 mil	
Fiber Count	2220 dtex	2000 denier	1/2

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	2000 MPa	290000 psi	filament 25.4mm
Tensile Modulus	186 GPa	27000 ksi	filament
Tear Strength	45.1 kN/m	258 pli	Fill, Breaking Strength w/o Sizing
	59.8 kN/m	342 pli	Warp, Breaking Strength w/o Sizing

Thermal Properties	Metric	English	Comments
CTE, linear	5.30 μm/m-°C @Temperature 100 - 1100 °C	2.94 μin/in-°F @Temperature 212 - 2010 °F	
Specific Heat Capacity	1.13 J/g-°C @Temperature 500 °C	0.270 BTU/lb-°F @Temperature 932 °F	
Melting Point	1800 °C	3270 °F	

Optical Properties	Metric	English	Comments
Refractive Index	1.614	1.614	

Component Elements Properties	Metric	English	Comments
Al2O3	70 %	70 %	
B2O3	2.0 %	2.0 %	

Component Elements Properties	Metric	English	Comments
<b>Electrical Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Dielectric Constant	5.7	5.7	
	@Frequency 9.375e+9 Hz	@Frequency 9.375e+9 Hz	
Dissipation Factor	0.015	0.015	
	@Frequency 9.375e+9 Hz	@Frequency 9.375e+9 Hz	

## Contact Songhan Plastic Technology Co.,Ltd.

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