

## 3M Nextel™ BF-30 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-30-Woven-Fabric-440.php](http://www.lookpolymers.com/polymer_3M-Nextel-BF-30-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	760 microns	29.9 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
	51.0 kN/m	291 pli	Warp, Breaking Strength w/o Sizing

Thermal Properties	Metric	English	Comments
CTE, linear	5.30 μm/m-°C	2.94 μin/in-°F	
	@Temperature 100 - 1100 °C	@Temperature 212 - 2010 °F	
Specific Heat Capacity	1.13 J/g-°C	0.270 BTU/lb-°F	
	@Temperature 500 °C	@Temperature 932 °F	
Thermal Conductivity	0.130 W/m-K	0.902 BTU-in/hr-ft <sup>2</sup> -°F	
	@Temperature 200 °C	@Temperature 392 °F	
	0.141 W/m-K	0.979 BTU-in/hr-ft <sup>2</sup> -°F	
	@Temperature 400 °C	@Temperature 752 °F	
	0.150 W/m-K	1.04 BTU-in/hr-ft <sup>2</sup> -°F	
	@Temperature 600 °C	@Temperature 1110 °F	
	0.181 W/m-K	1.26 BTU-in/hr-ft <sup>2</sup> -°F	

Thermal Properties	@Temperature 800 °C Metric	@Temperature 1470 °F English	Comments
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 %	
SiO2	28 %	28 %	

Electrical Properties	Metric	English	Comments
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.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China