

3M Nextel™ AF-11 w/o sizing Aerospace Woven Fabric 312

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-AF-11-wo-sizing-Aerospace-Woven-Fabric-312.php

Physical Properties	Metric	English	Comments
Density	2.70 g/cc	0.0975 lb/in ³	
Permeability	40	40	[ft ³ /min/ft ²], Air w/o sizing
Thickness	230 microns	9.06 mil	
Fiber Count	1330 dtex	1200 denier	roving

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	1700 MPa	247000 psi	filament 25.4mm
Tensile Modulus	152 GPa	22000 ksi	filament
Tear Strength	20.6 kN/m	118 pli	Warp, Breaking Strength w/o Sizing
	23.5 kN/m	134 pli	Fill, Breaking Strength w/o Sizing

Thermal Properties	Metric	English	Comments
CTE, linear	3.00 $\mu\text{m}/\text{m}\cdot\text{°C}$ @Temperature 25.0 - 500 °C	1.67 $\mu\text{in}/\text{in}\cdot\text{°F}$ @Temperature 77.0 - 932 °F	
Specific Heat Capacity	1.05 J/g $\cdot\text{°C}$ @Temperature 500 °C	0.251 BTU/lb $\cdot\text{°F}$ @Temperature 932 °F	
Melting Point	1800 °C	3270 °F	

Optical Properties	Metric	English	Comments
Refractive Index	1.568	1.568	

Component Elements Properties	Metric	English	Comments
Al2O3	62.5 %	62.5 %	
B2O3	13 %	13 %	

Component Elements Properties	Metric	English	Comments
Electrical Properties	Metric	English	Comments
Dielectric Constant	5.2	5.2	
	@Frequency 9.375e+9 Hz	@Frequency 9.375e+9 Hz	
Dissipation Factor	0.018	0.018	
	@Frequency 9.375e+9 Hz	@Frequency 9.375e+9 Hz	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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