

Industrial Laminates/Norplex NP504 Glass Fabric

Category : Polymer , Thermoset , Phenolic

Material Notes:

Description: Woven glass fabric with high temperature phenolic resin. Good flexural, compressive and impact strengths at elevated temperatures. Capable of continuous operation at 175Å° C, see note 2.NP504 has excellent creep resistance because of the phenolic resin system.Thickness Tested: 0.062", 0.125", and 0.500".

Order this product through the following link:

http://www.lookpolymers.com/polymer_Industrial-LaminatesNorplex-NP504-Glass-Fabric.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.75 - 1.85 g/cc	1.75 - 1.85 g/cc	ASTM D792
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Moisture Absorption at Equilibrium	2.0 %	2.0 %	ASTM D229
	@Thickness 1.57 mm	@Thickness 0.0620 in	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	100 - 120	100 - 120	ASTM D785
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Tensile Strength, Yield	234 MPa	34000 psi	CW; ASTM D638
	@Thickness 1.57 mm	@Thickness 0.0620 in	
	290 MPa	42000 psi	LW; ASTM D638
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Modulus of Elasticity	9.65 GPa	1400 ksi	CW; ASTM D229
	@Thickness 1.57 mm	@Thickness 0.0620 in	
	12.4 GPa	1800 ksi	LW; ASTM D229
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Flexural Strength	234 MPa	34000 psi	CW; ASTM D790
	@Thickness 1.57 mm	@Thickness 0.0620 in	
	279 MPa	40500 psi	LW; ASTM D790
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Compressive Strength	524 MPa	76000 psi	ASTM D695
	@Thickness 12.7 mm	@Thickness 0.500 in	
	124 MPa	18000 psi	

Shear Strength Mechanical Properties	Metric @ Thickness 15.7 mm	English @ Thickness 0.620 in	ASTM D732 Comments
Izod Impact, Unnotched	5.87 J/cm @Thickness 12.7 mm	11.0 ft-lb/in @Thickness 0.500 in	CW, Cond E-48/50; ASTM D256
	6.41 J/cm @Thickness 12.7 mm	12.0 ft-lb/in @Thickness 0.500 in	LW, Cond E-48/50; ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	15.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ @Thickness 1.57 mm, Temperature 20.0 $\text{Å}^\circ\text{C}$	8.33 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ @Thickness 0.0620 in, Temperature 68.0 $\text{Å}^\circ\text{F}$	x-axis; IPC-TM 650-2.4.24
CTE, linear, Transverse to Flow	18.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ @Thickness 1.57 mm, Temperature 20.0 $\text{Å}^\circ\text{C}$	10.0 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ @Thickness 0.0620 in, Temperature 68.0 $\text{Å}^\circ\text{F}$	x-axis; IPC-TM 650-2.4.24
Maximum Service Temperature, Air	175 $\text{Å}^\circ\text{C}$	347 $\text{Å}^\circ\text{F}$	
Flammability, UL94	HB @Thickness 1.57 mm	HB @Thickness 0.0620 in	

Electrical Properties	Metric	English	Comments
Dielectric Strength	7.87 kV/mm @Thickness 1.57 mm	200 kV/in @Thickness 0.0620 in	Cond D-48/50; ASTM D229 S.T.
	14.8 kV/mm @Thickness 1.57 mm	375 kV/in @Thickness 0.0620 in	Cond A; ASTM D229 S.T.
Dielectric Breakdown	15000 V @Thickness 1.57 mm	15000 V @Thickness 0.0620 in	Cond D-48/50; ASTM D229 S/S
	50000 V @Thickness 1.57 mm	50000 V @Thickness 0.0620 in	Cond A; ASTM D229 S/S
Arc Resistance	100 sec @Thickness 3.17 mm	100 sec @Thickness 0.125 in	ASTM D495
Comparative Tracking Index	150 V @Thickness 3.17 mm	150 V @Thickness 0.125 in	ASTM D3638

Descriptive Properties	Value	Comments
Bond Strength	1600 lb	0.5", ASTM D229

Descriptive Properties

Value

Comments

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