

Industrial Laminates/Norplex NP310U Cotton Fabric

Category : Polymer , Thermoset , Phenolic

Material Notes:

Description: Utility grade canvas phenolic with properties similar to NP310E. Not certifiable to NEMA due to low crosswise flexural strength.

Previously designated NP310C. Thickness Tested: 0.062", 0.125", and 0.500"

Order this product through the following link:

http://www.lookpolymers.com/polymer_Industrial-LaminatesNorplex-NP310U-Cotton-Fabric.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.30 - 1.40 g/cc	1.30 - 1.40 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	90 - 110	90 - 110	ASTM D785
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Tensile Strength, Yield	41.4 MPa	6000 psi	CW; ASTM D638
	@Thickness 1.57 mm	@Thickness 0.0620 in	
	51.7 MPa	7500 psi	LW; ASTM D638
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Modulus of Elasticity	6.21 GPa	900 ksi	LW; ASTM D229
	@Thickness 1.57 mm	@Thickness 0.0620 in	
	6.89 GPa	1000 ksi	CW; ASTM D229
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Flexural Strength	93.1 MPa	13500 psi	CW; ASTM D790
	@Thickness 1.57 mm	@Thickness 0.0620 in	
	159 MPa	23000 psi	LW; ASTM D790
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Compressive Strength	193 MPa	28000 psi	ASTM D695
	@Thickness 12.7 mm	@Thickness 0.500 in	
Shear Strength	89.6 MPa	13000 psi	ASTM D732
	@Thickness 15.7 mm	@Thickness 0.620 in	

Mechanical Properties	Metric J/cm	English lb/in	Comments
Izod Impact, Unnotched	@Thickness 12.7 mm	@Thickness 0.500 in	CW, Cond E-48/50; ASTM D256
	0.801 J/cm @Thickness 12.7 mm	1.50 ft-lb/in @Thickness 0.500 in	LW, Cond E-48/50; ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	20.0 $\mu m/m-^{\circ}C$	11.1 $\mu in/in-^{\circ}F$	x-axis; IPC-TM 650-2.4.24
	@Thickness 1.57 mm, Temperature 20.0 $^{\circ}C$	@Thickness 0.0620 in, Temperature 68.0 $^{\circ}F$	
CTE, linear, Transverse to Flow	22.0 $\mu m/m-^{\circ}C$	12.2 $\mu in/in-^{\circ}F$	x-axis; IPC-TM 650-2.4.24
	@Thickness 1.57 mm, Temperature 20.0 $^{\circ}C$	@Thickness 0.0620 in, Temperature 68.0 $^{\circ}F$	
Maximum Service Temperature, Air	125 $^{\circ}C$	257 $^{\circ}F$	
Flammability, UL94	HB	HB	
	@Thickness 1.57 mm	@Thickness 0.0620 in	

Electrical Properties	Metric	English	Comments
Dielectric Strength	21.7 kV/mm	550 kV/in	Cond A; ASTM D229 S.T.
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Dielectric Breakdown	50000 V	50000 V	Cond A; ASTM D229 S/S
	@Thickness 1.57 mm	@Thickness 0.0620 in	
Arc Resistance	15 sec	15 sec	ASTM D495
	@Thickness 3.17 mm	@Thickness 0.125 in	
Comparative Tracking Index	150 V	150 V	ASTM D3638
	@Thickness 3.17 mm	@Thickness 0.125 in	

Descriptive Properties	Value	Comments
Bond Strength	1900 lb	0.5", ASTM D229
Color	Natural, Black	

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