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SINCE 1921

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MATERIAL DATA SHEET

Material: Lamitex® Grade XXX Paper Phenolic Laminate Sheet

Description: Lamitex XXX sheet has excellent machining characteristics, low moisture absorption and excellent dimensional stability over large changes in temperature and humidity. Chemical resistance is good when exposed to organic solvents and oils. Grade XXX is frequently specified for use in switchgear, oil filled transformers and power distribution products, tooling stock and test panel applications.

Standards: NEMA LI-1 Grade XXX
MIL-I-24768 / 10 - PBE
EN 60893 PF CP 204
DIN 7735 Hp 2062.8

Availability: Grade XXX is also manufactured as round tubes (convolute wound), molded channel, angle, square and rectangular tubes and fabricated custom parts.

Physical Properties	Test Condition	ASTM	Typical Values
Thickness			.125"
Specific Gravity		D792	1.38
Rockwell Hardness (M Scale)		D785	101
Moisture Absorption (maximum)	D 24/23	D229	.95 %
Flexural Strength (.060")	Condition A: Lengthwise Crosswise	D790	20,000 psi 15,000 psi
Tensile Strength	Condition A: Lengthwise Crosswise	D638	14,000 psi 12,000 psi
Compressive Strength	Condition A: Flatwise	D695	30,000 psi
Izod Impact Strength (.500" thick)	E48/50: Lengthwise Crosswise	D256	0.55 ft-lb/in.(notch) 0.45 ft-lb/in.(notch)
Bond Strength (.500" thick)	Condition A D 48/50	D229	1000 lbs 700 lbs
Thermal & Electrical Properties			
Temperature Index Electrical / Mechanical			140° C / 140° C
Coefficient of Thermal Expansion			20.0 cm/cm/°C/ x 10-6
U.L.® 94 Flammability Rating			94-HB
Dielectric Breakdown Voltage (step x step)	Condition A / D 48/50	D229	50.0 kV / 6.0 kV
Maximum Permittivity @ 1 MHz	Condition A / D 24/23	D229	5.30 / 5.70
Maximum Dissipation @ 1 MHz	Condition A / D 24/23	D229	0.038 / 0.045
Dielectric Strength (short time)	Condition A	D229	320 Vpm
Dielectric Strength (step x step)	Condition A	D229	320 Vpm
Comparative Tracking Index (CTI)	Pt electrodes	D 3638	199

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