



Composites For Today's Challenges

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Lamitex® X Sheet

Lamitex® / μS + #33" μ#< "±2" - "2" ±2" "S ¶" "· - "3" μ" "μ" intended for mechanical applications. It has high relative mechanical properties but low electrical characteristics when compared to XX and XXX type materials. Special precautions must be taken to prevent cracking if the material is to be tapped or machined parallel to laminations. Grade X laminate is frequently specified for use as mounting blocks or panels, washer and spacers.

Standards: NEMA LI-1 Grade X
MIL-I-24768 / 12 - PBM
EN 60893 PF CP 201

Availability: Grade X 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	1.36
Rockwell Hardness (M Scale)			D785	110
Moisture Absorption (maximum)	D 24/23		D229	3.30 %
Flexural Strength	Condition A: Lengthwise Crosswise		D229	25,000 psi 22,000 psi
Tensile Strength	Condition A: Lengthwise Crosswise		D638	16,000 psi 13,000 psi
Compressive Strength	Condition A: Flatwise Edgewise		D695	36,000 psi 19,000 psi
Izod Impact Strength (.500" thick)	E48/50: Lengthwise Crosswise		D256	0.50 ft-lb/in.(notch) 0.40 ft-lb/in.(notch)
Bond Strength (.500" thick)	Condition A D 48/50		D229	700 lbs 400 lbs

Thermal & Electrical Properties

Temperature Index Electrical / Mechanical			130° C / 130° 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	23.0 kV / 5.0 kV
Maximum Permittivity @ 1 MHz	Condition A / D 24/23	D229	5.50 / 6.00
Maximum Dissipation @ 1 MHz	Condition A / D 24/23	D229	0.045 / 0.050
Electrical Strength (short time) perpendicular to laminations	Condition A	D229	500 Vpm
Electrical Strength (step x step) perpendicular to laminations	Condition A	D229	360 Vpm
Comparative Tracking Index (CTI)	Pt electrodes	D 3638	239

All information and suggestions pertaining to the properties and uses of the materials described herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any material for such use is the sole responsibility of the user. No warranty is expressed or implied, including, without limitation, warrant of merchantability or fitness for a particular purpose. Under no circumstances shall Lamitex, LLC be liable for incidental or consequential loss or damage.

Composite Tubes • Bearings • Molded Shapes • Rotary Vanes • Fabricated Parts • Vulcanized Fibre • High Temp Insulation