



## MATERIAL DATA SHEET

**Material:** Lamitex® Grade G-3 Glass Phenolic Laminate Sheet

**Description:** Lamitex® G-3 glass/phenolic laminated sheet is frequently specified for its high mechanical strength, excellent arc resistance, heat resistance and low smoke emission and toxicity properties.

<b>Standards:</b>	NEMA LI-1 Grade	G-3	<b>Availability:</b>	G-3 is also manufactured as round tubes (convolute wound), rods, molded channel, angle, square and rectangular tubes and fabricated custom parts.
	MIL-I-24768	/ 18 Type GPG		
	EN 60893	PF GC 201		
	DIN	Hgw 2072		
	British Standard	3953 PF-2		

Physical Properties	Test Condition	ASTM	Typical Values
Thickness			.125"
Specific Gravity		D792	1.85
Rockwell Hardness (M Scale)		D785	110
Moisture Absorption (maximum)		D229	2.0%
Flexural Strength	Condition A: Lengthwise Crosswise	D229	40,000 psi 30,000 psi
Tensile Strength	Condition A: Lengthwise Crosswise		42,000 psi 34,000 psi
Compressive Strength	Condition A: Flatwise Edgewise	D695	76,000 psi 25,000 psi
Izod Impact Strength (.500" thick)	E48/50: Lengthwise Crosswise	D229	12.0 ft-lb/in.(notch) 11.0 ft-lb/in.(notch)
Bond Strength (.500" thick)	Condition A D 48/50	D229	1,570 lbs 1,400 lbs

### Thermal & Electrical Properties

Temperature Index Electrical / Mechanical			140°C / 170°C
Coefficient of Thermal Expansion			1.8 cm/cm/°C x 10 <sup>-5</sup>
U.L.® 94 Flammability Rating			94-HB
Dielectric Breakdown Voltage (step x step)	Condition A / D 48/50	D149	32.0 kV / 28.0 kV
Maximum Permittivity @ 1 MHz	Condition A / D 24/23	D150	0.046 / 0.047
Maximum Dissipation @ 1 MHz	Condition A / D 24/23	D150	6.14 / 6.27
Dielectric Strength (short time)	Condition A	D229	600 Vpm
Dielectric Strength (step x step)	Condition A	D229	450 Vpm
Arc Resistance	Condition A	D 495	180 seconds

All information and suggestions pertaining to the properties and uses of the materials herein are based upon tests and data believed to be accurate: however, the final determination regarding the suitability of any described material herein for the 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 Franklin Fibre - Lamitex Corp. be liable of incidental or consequential loss or damage.