



## Lamitex® GPO-3 Sheets

Lamitex® Grade GPO-3 sheet is a random glass composite reinforced with a polyester flame retardant resin formulation. GPO-3 has good mechanical strength, dielectric strength. GPO-3 has excellent arc and carbon tracking resistance.

<b>Standards:</b>	NEMA LI-1 Grade	GPO-3
MIL-I-24768	/ 6 Type GPO N3	
EN 60893	UP GM 203	
DIN	Hm 2471	
British Standard	3953 UP-5	

**Availability:** GPO-3 is also manufactured as pultruded tubes, channel, angle, rod, and custom shapes. Custom parts are frequently manufactured by compression molding, injection molding of BMC (bulk molding compound) and fabricated from sheets or shapes.

Physical Properties	Test Condition	ASTM	Typical Values
Thickness			.125"
Specific Gravity		D792	1.81
Rockwell Hardness (M Scale)		D785	100
Moisture Absorption (maximum)		D570	.25%
Flexural Strength	Condition A: Lengthwise Crosswise	D790	26,000 psi 22,500 psi
Tensile Strength	Condition A: Lengthwise Crosswise	D638	11,200 psi 9,500 psi
Compressive Strength	Condition A: Flatwise	D229	33,000 psi
Izod Impact Strength (.500" thick)	E48/50	D229	8.9 ft-lb/in.(notch)
Bond Strength (.500" thick)	Condition A	D229	850 lbs
	E48/50	D229	800 lbs

### Thermal & Electrical Properties

Temperature Index Electrical / Mechanical			120° C / 140° C
Coefficient of Thermal Expansion			2.0 in/in/°C x 10 <sup>-5</sup>
U.L.® 94 Flammability Rating			94-V0
Electric Strength Perpendicular (short time)	In Air / In Oil	D149	450 Vpm / 584 Vpm
Maximum Permittivity @ 60 Hz	Condition A	D229	4.50
Maximum Permittivity @ 1 MHz	Condition A / D 24/23	D229	4.30 / 4.40
Dissipation Factor @ 60 Hz	Condition A	D150	.013
Dissipation Factor @ 1 MHz	Condition A	D150	.010
Inclined Plane Track Resistance	Condition A	D2303	> 300 minutes
Electrical Strength Parallel (step x step)	In Oil	D149	47 kV
Arc Resistance	Condition A	D 495	181 seconds

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