

Lamitex® G3 Glass Phenolic Tubes

Lamitex® G3 glass/phenolic tubes are most frequently specified for applications that require high flexural and high impact strengths with good electrical properties under low relative humidity conditions. It is a self extinguishing halogen free composite with good chemical resistance. Application standards for Lamitex G3 are: IEC EN 61212-3-1, PF GC 21, Hgw 2075 and NEMA L1 grade G3.

<u>Mechanical Properties</u>	<u>Standard</u>	<u>Test Specimen</u>	<u>Conditioning</u> <u>IEC 212</u>	<u>Values</u>
Flexural Strength	ISO 178	id>100 mm	1	300 MPa
Compressive Strength, Axial	ISO 604		1	220 MPa
Cohesion between layers	EN 61212-2	id<100 mm	1	250 MPa
<u>Electrical Properties</u>				
Electric Strength in oil @ 90°C:				
Perpendicular to Laminations	IEC 243-1	3 mm wall thk	2	8 kV/mm
Parallel to Laminations	IEC 243-1	>3 mm wall thk	2	50 kV/ 25 mm
Insulation resistance after immersion in water	IEC 167	id>8mm and or od>10mm	4	1000 M ohm
Permittivity 50 Hz & 1 MHz	IEC 250		3	5.0
Dissipation Factor 50 Hz	IEC 250		3	0.030
Dissipation Factor 1 MHz	IEC 250		3	0.040
<u>Physical and Thermal Properties</u>				
Thermal endurance index @ 20,000 hrs	IEC 216		-	155°C
Density	IEC 1183-A	All	1	1.85 g/cm ³
Water Absorption	ASTM D229		4	0.60%

Conditioning: 1: 24h @ 23°C & 50%RH
2: 24h @ 23°C & 50%RH + 1hr in oil at 90°C
3: 96h @ 105°C + 1hr @ 23°C & 20%RH
4: 24h @ 50°C + 24hr in water at 23°C

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