



## Lamitex® G-30 Sheets

Lamitex® glass filled G-30 Polyimide high pressure laminate sheets are the most temperature resistant laminate made. G-30 is most frequently used where high mechanical and electrical strengths, dimensional stability and low thermal conductivity at high continuous application temperatures are required.

### Conditioning

<u>Mechanical Properties</u>	<u>IEC 212</u>	<u>Test Method</u>	<u>Test Specimen</u>	<u>Values</u>
Flexural Strength	1	ISO 178	≥ 1,6 mm	450 MPa
Flexural Strength at Elevated Temperatures	E	ISO 178	≥ 1,6 mm	360 <sup>(a)</sup> MPa
Modulus of Elasticity	1	ISO 178	≥ 1,6 mm	25.000 MPa
Compressive Strength	1	ISO 604	≥ 5,0 mm	650 MPa
Izod Impact Strength Parallel	1	ISO 180/2A	≥ 5,0 mm	55 kJ/m <sup>2</sup>
Shearing Strength Parallel	1	EN 60893-2	≥ 5,0 mm	70 MPa
Tensile Strength	1	ISO 527	≥ 1,6 mm	300 MPa

### Electrical Properties

Electric Strength in oil @ 90°C:

Perpendicular to Laminations	2	IEC 243-1	3,0 mm thk	20,0 kV/mm
Parallel to Laminations	2	IEC 243-1	> 3,0 mm thk	60 kV/25 mm
Insulation Resistance after Immersion in Water	4	IEC 167	All	1.000 M ohm
Permittivity:	50Hz	IEC 250	≤ 3,0 mm thk	4,0
Dissipation Factor:	50Hz	IEC 250	≤ 3,0 mm thk	0,01
Comparative Tracking Index	1	IEC 112	≥ 3,0 mm thk	250 CTI

### Physical and Thermal Properties

Maximum Operating Temperature: Electrical/Mechanical				240°C/240°C
UL Flammability Rating	1	IEC 216	3,0 mm thk	94-V0
Density	1	IEC 1183-A	All	1,95 g/cm <sup>3</sup>
Water Absorption	1	ASTM D570	1.5 mm	<.35%

Conditioning: 1: 24h @ 23°C & 50%RH

Note: (a) 1h @ 200°C / measured at 200°C

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

The standard sheet size is 1250 mm x 1250 mm and thicknesses manufactured are 0,15 mm to 150 mm

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.

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