

Lamitex® G-9 Glass/Melamine Sheet

Lamitex® G9 glass/melamine laminated sheet is most frequently preferred for application that require high mechanical strengths, exceptional arc resistance and self extinguishing properties. Lamitex G-9 meets or exceeds NEMA G-9 & G5, Mil-I-24768/1 & /8 specifications and meets UL 94-V0 requirements.

<u>Physical Properties</u>	<u>Test Condition</u>	<u>ASTM</u>	<u>Values</u>
Specific Gravity		D792	1.90
Rockwell Hardness (M Scale) .250" build-up		D785	115
Moisture Absorption (maximum) .062"	D 24/23	D570	0.50%
Flexural Strength (.062")	Condition A: Lengthwise Crosswise	D790	70,500 psi / 486.1 MPa 63,200 psi / 435.7 MPa
Flexural Modulus (.062")	Condition A: Lengthwise Crosswise	D790	2,000 psi / 13.8 MPa 1,700 psi / 11.7 MPa
Tensile Strength (.125")	Condition A: Lengthwise Crosswise	D638	50,000 kpsi / 344.7 GPa 35,000 kpsi / 241.3 GPa
Compressive Strength (.500" thick)	Condition A: Flatwise	D695	85,000 psi / 586.1 MPa
Izod Impact Strength (.500" thick)	E48/50: Lengthwise Crosswise	D229	16.5 ft-lb/in. / 8.81 J/cm 12.5 ft-lb/in. / 8.81 J/cm
Bond Strength (.500" thick)	Condition A	D229	1,900 lbs / 865 kg
Shear Strength (.062" thick)	Condition A perpendicular	D229	18,000 psi / 124.1 MPa
<u>Thermal & Electrical Properties</u>			
Temperature Index	Electrical Mechanical		140° C 140° C
Coefficient of Thermal Expansion (.125") (x- axis / y-axis)	IPC-TM 650-2 4.24		15.0 / 18.0 in/in/°C / $\times 10^{-6}$
U.L.® 94 Flammability Rating (.062")			94-V0
Dielectric Breakdown Voltage (.062")	Condition A D 48/50	D149 D149	70.0 kV 65.0 kV
Relative Permittivity @ 1 MHz (.062")	D 24/23	D150	7.03
Dielectric Strength (.062")	Condition A D 48/50	D149 D149	540 Vpm / 212.6kV/cm 550 Vpm / 216.5 kV/cm
Dissipation Factor @ 1 MHz (.062")	D 24/23	D150	0.015
Arc Resistance (.125")	Condition A	D495	185 Seconds
Comparative Tracking Index (CTI)		D3638	600 Volts

Standards: NEMA LI-1 Grade G-9
Mil-I-24768 / 1 Type GME
EN 61212-3-1: MF GC 201
Din 7735 Hgw 2272

Availability: Grade G-9 is also manufactured as round tubes (convolute wound), round molded rods and fabricated custom parts.
NEMA does not recommend glass melamine for round molded tubes or rods because mold seams are considered weak points mechanically and electrically.

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 Franklin Fibre - Lamitex Corp be liable for incidental or consequential loss or damage.