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ELECTRICAL INSULATION MATERIALS
SINCE 1921

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MATERIAL DATA SHEET

Material: Lamitex® Grade G-9 Glass Melamine Laminate Sheet

Description: Lamitex® G-9 glass/melamine laminated sheet is most frequently preferred for applications that require high mechanical strengths, self extinguishing properties and exceptional arc resistance in humid environments.

Standards: NEMA LI-1 Grade G-9
MIL-I-24768 / 1 Type GME
EN 60893 MF GC 201
DIN Hgw 2272
British Standard 3953 MF-4

Availability: G-9 is also manufactured as molded channel, angle, square and rectangular tubes and fabricated custom parts.

Physical Properties	Test Condition	ASTM	Typical Values
Thickness			.125"
Specific Gravity		D792	1.90
Rockwell Hardness (M Scale)		D785	120
Moisture Absorption (maximum)		D229	0.75 %
Flexural Strength	Condition A: Lengthwise Crosswise	D229	55,000 psi 35,000 psi
Tensile Strength	Condition A: Lengthwise Crosswise		37,000 psi 30,000 psi
Compressive Strength	Condition A: Flatwise Edgewise	D695	70,000 psi 25,000 psi
Izod Impact Strength (.500" thick)	E48/50: Lengthwise Crosswise	D229	7.0 ft-lb/in.(notch) 5.5 ft-lb/in.(notch)
Bond Strength (.500" thick)	Condition A D 48/50	D229	1,700 lbs 1,500 lbs

Thermal & Electrical Properties

Temperature Index Electrical / Mechanical			140° C / 140° C
Coefficient of Thermal Expansion			10.0 cm/cm/°C x 10 ⁻⁶
U.L.® 94 Flammability Rating			94-V0
Dielectric Breakdown Voltage (step x step)	Condition A / D 48/50	D229	60.0 kV / 55.0 kV
Maximum Permittivity @ 1 MHz	Condition A / D 24/23	D229	7.20 / 7.40
Maximum Dissipation @ 1 MHz	Condition A / D 24/23 / D48 / 50	D229	0.017 / 0.018 / 0.020
Dielectric Strength (short time)	Condition A	D229	350 Vpm
Dielectric Strength (step x step)	Condition A	D229	275 Vpm
Arc Resistance	Condition A	D 495	185 seconds

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