

**MATERIAL DATA SHEET****Material:** Lamitex® Grade G-9 Glass Melamine Laminate Sheet**Description:** Lamitex® G-9 glass/melamine laminated sheets are most frequently preferred for applications that require high mechanical strengths, self extinguishing properties and exceptional arc and tracking resistance, especially in humid environments.

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|-------------------|------------------|--------------|----------------------|--|
| Standards: | NEMA LI-1 Grade | G-9 | Availability: | G-9 is also manufactured as molded channel, angle, square and rectangular tubes and fabricated custom parts. (For round tubes (convolute wound), please refer to Grade G-5.) |
| | MIL-I-24768 | / 1 Type GME | | |
| | EN 60893 | MF GC 201 | | |
| | DIN | Hgw 2272 | | |
| | British Standard | 3953 MF-4 | | |

| 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 | | | 50°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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