



THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

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|---------------|---|--|--|
| Item: | NEMA Grade G-9 Glass Melamine Laminate | | |
| Description: | NEMA Grade G-9 material is a woven glass cloth reinforced laminate with a melamine resin binder. Glass melamine insulating materials offer high mechanical strength. G-9 from The Gund Company has excellent flame arc resistance. Common applications include electric furnace insulation, circuit breaker components, switchboard panels, arc chutes, and motor wedges. | | |
| Standards: | NEMA LI-1: Grade G-9 | IEC 60893: MF GC 201 | MIL-I-24768/1-GME |
| Availability: | Laminate Sheets: | Thickness: | English Units (in): .008 to 4.0 (in) SI Units: .02 mm to 101.6 mm (mm) |
| | | Sheet Sizes: | English Units (in): 36 x 48 to 48 x 108 (in) SI Units: 91.4 x 122 to 122 x 274.3 (cm) |
| | Convolute Tubing: | NEMA Grade G-9 is available in an infinite number of custom sizes | |
| | Fabricated Parts: | The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers. | |

| Key Characteristics | Units - English (SI) | Typical Values |
|---------------------|---------------------------|--------------------------|
| Standard Color | -- | Camel, Gray ¹ |
| Specific Gravity | lb/in ³ (g/cc) | 1.85 |

¹ Custom colors are available upon request

NEMA LI-1 G-9 Required Properties

| Key Characteristics | | Test Method | Units | NEMA Required | Typical Values |
|------------------------------|----------------------|--------------|-----------|---------------|----------------|
| Breakdown Voltage (.125") | Condition A | ASTM D-149 | kV | 60 min | 65 |
| | Condition D - 48/50 | | | 55 min | 60 |
| Permittivity (0.062") | Condition A | ASTM D-150 | -- | 7.20 max | 6.50 |
| | Condition D - 24/23 | | | 7.40 max | 6.70 |
| | Condition D - 48/50 | | | 7.50 max | 7.00 |
| Dissipation Factor (0.062") | | ASTM D-24/23 | -- | -- | 0.015 |
| IZOD Strength | Length-Wise | ASTM D-256 | ft-lbs/in | 7.0 min | 12.5 |
| | Cross-Wise | | | 5.5 min | 8.5 |
| Flexural Strength (0.125") | Length-Wise | ASTM D-790 | ksi (MPa) | 55 min | 73 (504) |
| | Cross-Wise | | | 35 min | 56 (386) |
| Bond Strength (0.500") | Condition A | ASTM D-229 | lbs (kg) | 1,700 min | 1,900 (862) |
| | Condition D - 48/50 | | | 1,500 min | 1,600 (726) |
| Moisture Absorption (0.125") | Condition D - 24/23 | ASTM D-229 | % | .70 max | .40 |
| | Condition E - 24/23+ | | | | |
| Flammability Rating | | UL94 | -- | -- | V-0 |