



# THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

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): 36x48 to 48x108 (in) SI Units: 91.4x122 to 122x274.3 (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 <sup>1</sup>
Specific Gravity	lb/in <sup>3</sup> (g/cc)	1.85

<sup>1</sup> 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