



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

NEMA G-9

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: (IM 60000) • IEC 60893: MF GC 201 • MIL-I-24768/1-GME			
Availability:	Laminate Sheets:	Thickness:	English Units (in) 0.008 - 4.0	SI Units (mm/cm) 0.2 mm - 101.6 (mm)
		Sheet Size:	36 x 48 - 48 x 108	91.4 x 122 - 122 x 274.3 (cm)
	Convolute Tubing:	NEMA Grade G-9 convolute tubes are available from The Gund Company in nearly any custom size of inside and outside diameter, per customer requirements.		
	Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers.		

Key Characteristics	Units - English (SI)	Typical Values
Standard Color	--	Camel, Gray ¹
Density	lbs/in ³ (g/cc)	0.067 (1.85)

¹ Custom colors available upon request

NEMA LI-1 G-9 Required Properties

Key Characteristics	Test Method	Units	NEMA Required	Typical Values	
Breakdown Voltage (0.125")	ASTM D-149	kV	Condition A	60 min	65
			Condition D - 48/50	55 min	60
Permittivity (0.062")	ASTM D-150	--	Condition A	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	ASTM D-256	ft-lbs/in	Lengthwise	7.0 min	12.5
			Crosswise	5.5 min	8.5
Flexural Strength (0.125")	ASTM D-790	ksi (MPa)	Lengthwise	55 min	73 (504)
			Crosswise	35 min	56 (386)
Bond Strength (0.500")	ASTM D-229	lbs (kg)	Condition A	1,700 min	1,900 (862)
			Condition D - 48/50	1,500 min	1,600 (726)
Moisture Absorption (0.125")	ASTM D-229	%	Condition D - 24/23	0.70 max	0.40
			Condition E - 24/23+		
Flammability Rating	UL94	--	--	V-0	

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.