



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## NEMA G-7

<b>Item:</b>	<b>NEMA Grade G-7 Glass Silicone Laminate</b>			
<b>Description:</b>	NEMA Grade G-7 materials are glass fabric-reinforced laminates with a silicone resin binder. Glass silicone insulating materials offer excellent thermal resistance (up to 250°C) and arc resistance. These grades find application as electric furnace insulation, circuit breaker parts, switchboard panels, and arc barriers.			
<b>Standards:</b>	NEMA IM 60000: Grade G-7 • IEC 60893: SI GC 201 / SI GC 202 (sheet & tube) • MIL-I-24768: /17-GSG			
<b>Availability:</b>	<b>Laminate Sheets:</b>		English Units (in)	SI Units (mm/cm)
		Thickness:	0.125 - 1.25	3.18 - 31.75 (mm)
	Sheet Size:	48 x 96 - 48 x 120	122 x 244 - 122 x 305 (cm)	
	<b>Convolute Tubing:</b>	NEMA Grade G-7 convolute tubes are available from The Gund Company in nearly any custom size of inside and outside diameter, per customer requirements.		
<b>Fabricated Parts:</b>	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	--	White <sup>1</sup>
Density	lbs./in <sup>3</sup> (g/cc)	0.068 (1.9)

<sup>1</sup> Custom colors available upon request

### NEMA LI-1 G-7 Required Properties

Key Characteristics	Test Method	Units - English (SI)	Typical Values
Moisture Absorption (0.062")	ASTM D-570	%	0.19
Flexural Strength (0.25")	ASTM D-790, A	psi (MPa)	18,000 (124)
			15,000 (103)
IZOD Impact Strength	ASTM D-256	ft-lbs/in	17.0
			8.5
Arc Resistance (0.125")	ASTM D-495, A	Seconds	200
Compressive Strength, Flatwise	ASTM D-695, A	psi (MPa)	45,000 (310)
Flammability Rating	UL94	Class	V-0
Breakdown Voltage (0.062) [Both Parallel Step Method]	ASTM D-149, A	kV	55
	ASTM D-149, D-48/50		34
Dielectric Strength	ASTM D-149, A	V/mil	350
Permittivity (0.062")	ASTM D-150, D-24/23	--	4.34
Dissipation Factor (0.062")	ASTM D-150, D-24/23	--	0.017

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.