## THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

Item:	NEMA Grade G-7 Glass Silicone Laminate						
Description:	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.						
Standards:	NEMA LI-1: Grade G-7		IEC 60893: SI GC 201 (sheet & tube)	MIL-I-24768: /17-GSG			
Availability:			English Units (in)	SI Units (mm/cm)			
	Laminate Sheets:		0.125 to 1.25	3.18 to 31.75 <sup>(mm)</sup>			
		Sheet Sizes:	48 x 96 to 60 x 144	122 x 244 to 152 x 366			
	Convolute Tubes:	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.					
	Fabricated Parts: The Gund Company custom fabricates insulation materials to the and drawings of our customers.						

Key Characteristics	Units - English (SI)	Typical Values	
Standard Color	White <sup>1</sup>		
Specific Gravity	lb/in³ (g/cc)	0.19	

<sup>&</sup>lt;sup>1</sup> Custom colors are available upon request

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

Key Characteristics	Test Method	Units - English (SI)	Typical Values
Moisture Absorption (.062")	ASTM D-570, A	%	0.19
Flexural Strength (.25") Lengthwise Crosswise	ASTM D-790, A	psi (MPa)	18,000 (124) 15,000 (103)
IZOD Impact Strength Lengthwise Crosswise	ASTM D-256, A	ftlbs./in.	17.0 8.5
Arc Resistance (.125")	ASTM D-495, A	Seconds	200
Compressive Strength (Flat-wise)	ASTM D-695, A	psi (MPa)	45,000 (310)
Flammability Rating	UL94	Class	V-0
Breakdown Voltage (.062) (Borth Parallel Step Method)	ASTM D-149, A ASTM D-149, D-48/50	kV	55 34
Dielectric Strength	ASTM D-149, A	V/mil.	350
Permittivity (.062")	ASTM D-150, D-24/23		4.34
Dissipation Factor (.062")	ASTM D-150, D-24/23		0.0017