



MANUFACTURERS OF  
**ELECTRICAL INSULATION MATERIALS**  
 INSULATING COMPONENTS FOR  
 POWER SYSTEMS EQUIPMENT

**The Gund Company, Inc**  
 St. Louis, Missouri – USA  
 TEL - 314.423.5200  
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## MATERIAL DATA SHEET

**Item:** NEMA Grade Formable G-11 Glass Epoxy Laminate

**Description:** NEMA Grade Formable G-11 material is a formable, high strength medium weaves glass epoxy composite that retains fifty percent of its original properties at 155°C (Class F). Typical applications include insulation in power generation equipment and other structural parts.

**Standards:** NEMA LI-1 Grade G-11  
 IEC 60893 EP GC 203  
 MIL-I-24768 /3-GEB

**Availability:** Laminate Sheets: Thickness: English units .031", .047", .062", SI Units 0.78 mm, 1.19 mm, 1.57mm,  
 .084" 2.13 mm  
 Sheet Sizes: 48" x 72" 121.9 cm x 182.8 cm

**Fabricated Parts:** The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers.

Key Characteristics:	Test Method	Units - English (SI)	Typical Values
Standard Color			
Rockwell Hardness (1/8")		M Scale	110
Moisture Absorption (1/8")	ASTM D570	%	.09
Tensile Strength (.125") CW	ASTM D638	psi (MPa)	40,000 (275)
Compressive Strength (.500"), Flatwise	ASTM D695	psi (MPa)	50,000 (344)
Flexural Strength (.062") - Lengthwise - Crosswise	ASTM D790	psi (MPa)	54,000 (372) 44,000 (303)
Density	ASTM D792	Lb./in <sup>3</sup>	.069
Impact Strength IZOD Edgewise w/grain Edgewise cross grain	ASTM D256	ft-lbs/in	10.0 9.0
Arc Resistance (.125")	ASTM D495	Sec	185
Parallel Dielectric Strength (.500")	ASTM D149	kV	65
Bond Strength (.500")	ASTM D229	Lb (kg)	1,950 (886)
Temperature Index - Mechanical - Electrical	LI-6	°C	180 160

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 the suitability of any material described herein for the use contemplated, 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.



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Surface Resistivity	ASTM D257		$1 \times 10^6$
Dielectric Constant (.500")	ASTM D150	MHz	5.1

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