



MANUFACTURERS OF  
ELECTRICAL INSULATION MATERIALS

INSULATING COMPONENTS FOR  
POWER SYSTEMS EQUIPMENT

**The Gund Company, Inc**  
St. Louis, Missouri – USA

TEL - 314.423.5200  
FAX - 314.423.9009

## MATERIAL DATA SHEET

**Item:** NEMA Grade G-30 Glass Polyimide Laminate

**Description:** NEMA Grade G-30 is a polyimide based unclad material designed primarily to be used in the aviation industry where applications require superior mechanical and thermal performance. This non-brominated material possesses greater thermal protection than epoxy based products while maintaining bond strength at elevated temperatures.

**Standards:** NEMA Grade G-30  
IEC 60893 3 - 7 - PI  
MIL-P-13949 Type GI

**Availability:** Laminate Sheets: Thickness: English Units .0025" to 0.125" SI Units 0.0635 mm to 3.175 mm  
Sheet Sizes: 36" x 48" 91.4 cm x 122 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	--	--	Brown
Density	--	lb./in. (g/cc)	0.07
Specific Gravity	--	--	1.84
Rockwell Hardness (.062")	--	M Scale	120 ± 10
Moisture Absorption (.062")	ASTM D-570	%	0.35
Tensile Strength LW CW	ASTM D-638	psi (MPa)	48,000 (331) 40,000 (276)
Compressive Strength, Flatwise (.50")	ASTM D-695	psi (MPa)	70,000 (483)
Flexural Strength (.062") LW CW	ASTM D-790	psi (MPa)	78,000 (538) 66,000 (455)
Flexural Modulus (.062") LW CW	ASTM D-790	ksi	3,200 2,800
Shear Strength, Perpendicular (.062")	ASTM D-732	psi (MPa)	27,000 (186)
IZOD Impact Strength (.50") LW CW	ASTM D-256	ft.-lbs./in.	11.5 7.5
Bonding Strength (.50")	ASTM D-229	lb. (kg)	1,500 (680)
Breakdown Voltage	ASTM D-149	kV	65
Dielectric Strength (.062") Condition A D-48/50	ASTM D-149	V/mil	850 750
Comparative Tracking Index (.125")	ASTM D-3638	--	240
Arc Resistance (.125")	ASTM D-495	Seconds	130
Dissipation Factor (.062")	ASTM D-24/23	--	0.010

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.