



MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS
 INSULATING COMPONENTS FOR
 POWER SYSTEMS EQUIPMENT

The Gund Company, Inc
 St. Louis, Missouri – USA
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MATERIAL DATA SHEET

Item: Glass Cloth Polyimide Laminate

Description: Glass cloth polyimide laminate is designed primarily for use 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 LI-1 -
 IEC 60893 PI GC 301
 MIL-I-24768 -

Availability:	Laminate Sheets:	Thickness:	English units	SI Units
		Sheet Sizes:	.0025" to .125" 36" x 48"	.063mm to 3.17mm 91.4cm x 122cm

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
Specific Gravity		-	1.84
Rockwell Hardness (.062")	ASTM D 785-89	M Scale	120
Moisture Absorption (.062")	ASTM D570	%	.35
Tensile Strength LW (.125") CW	ASTM D638	psi (MPa)	48,000 (330.72) 40,000 (275.6)
Compressive Strength flatwise (.500")	ASTM D695	psi (MPa)	70,000 (482.3)
Flexural Strength LW (.062") CW	ASTM D790	psi (MPa)	78,000 (537.42) 66,000 (454.74)
Flexural Modulus LW (.125") CW		Psi (MPa)	32,000 (220.5) 28,000 (192.92)
IZOD Impact Strength LW E-48/50 (.500")	ASTM D256	ft-lbs/in notched	11.5 7.5
Arc Resistance (.125")	ASTM D495	Sec	130
Temperature Index (Electrical and Mechanical)		°C	240
Bond Strength (.500")	ASTM D229	Lb (kg)	1,500 (3,300)
U.L. 94 Flame Classification	Multiple ASTM	Class	HB
Dissipation Factor (.065")	Condition D-24/23		.010
Shear Strength (Perpendicular) (.062")		Psi (MPa)	27,000 (186)
Coefficient of Thermal Expansion X-axis		""/°C x 10-6	10.0

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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(.062") Y-axis			13.0
Comparative Track Index (.125")	D-3638		240
Breakdown Voltage (.062")	Condition – A Condition D-48/50	kV	65 55
Electric Strength (.062")	Condition – A Condition D-48/50	V/mil	850 750
Permittivity (.062")	Condition D-24/23		4.8
T _g		°C	200

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