



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

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## MATERIAL DATA SHEET

**Item:** Paper Phenolic Laminate Grade EPG

**Description:** Grade EPG is a cellulose based quality laminate impregnated with thermosetting resins, consolidated under high pressure and temperature in a dense, uniform sheet having good electrical and mechanical properties.

<b>Availability:</b>	Laminate Sheets:	Thickness:	English units	SI Units
			0.125", .188", .25", .313", .375", .5", .75", 1", 1.25", 1.5", and 2" (only in 48"x96")	3.18mm, 4.78mm, 6.35mm, 7.95mm, 9.53mm, 12.7mm, 19.1mm, 25.4mm, 31.75mm, 38.1mm, and 50.8mm
		Sheet Sizes:	48"x96" 60"x120" 60"x144"	122cmx244cm 152cmx305cm 152cmx366cm

**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
Density		lbs/in <sup>3</sup> (g/cc)	0.05(1.38)
Water Absorption(1/8" thick)	ASTMD-570	%	3.58
Tensile Strength	ASTMD-638	psi(MPa)	30,000(207)
Compressive Strength	ASTMD-695,(flatwise)	psi(MPa)	45,000(310)
Flexural Strength	ASTMD-790	psi(MPa)	30,300(209)
Bond Strength	ASTMD-732	psi(MPa)	2,000(13.8)
Rockwell Hardness	ASTMD-785	M Scale	113
Shear Strength	ASTMD-732	psi(MPa)	14,000(97)
Relative Thermal Index			130°C
Impact Strength IZOD(Edgewise)	ASTMD-256	ft-lbs/in	1
Flame Classification	UL94		.028"—94HB .062"—94HB
Arc Resistance(1/8")	ASTMD-495	sec	41
Dielectric Constant @ 1.0kHz(1/8")	ASTMD-150		8.1
Dissipation Factor(1/8")	ASTMD-150		.151

All of the information, suggestions, and recommendations herein are based upon tests and data believed to be accurate; however, the final decision regarding the suitability of any material contemplated, the manner of such use, and whether the user 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 losses or damages.

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DielectricStrength(Perp.1/8",oil)	ASTMD-149,(A-short)	V/mil(kV/mm)	340(13.26)
BreakdownVoltage(Perp.1/8",oil)	ASTMD-149,(A-short)	kV	43

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