



MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS
 INSULATING COMPONENTS FOR
 POWER SYSTEMS EQUIPMENT

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MATERIAL DATA SHEET

Item: EMD-200 Glass Mat Polyester

Description: EMD-200 is a glass mat reinforced polyester material designed primarily for the fabrication of slot wedges in large motors and generators. EMD-200 is used in applications that demand low weight loss, high flexural and shear strength at elevated temperatures.

Availability:	Laminate Sheets:	Thickness:	English units 0.032"–1"	SI Units 0.8mm–25mm
		Sheet Sizes:	36"x72" 48"x60" 48"x96"	91cmx183cm 122cmx152cm 122cmx244cm

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			Black
Density		lbs/in ³ (g/cc)	.070(1.94)
Water Absorption(1/8" thick)	ASTM D-570	%	.19
Hardness(Barcol)			67
Tensile Strength	ASTM D-638	psi(MPa)	16,500(114)
Compressive Strength(flatwise)	ASTM D-695	psi(MPa)	52,000(359)
Flexural Strength(lengthwise, room temp)	ASTM D-790	psi(MPa)	33,000(228)
Flexural Strength(lengthwise 130 °C)	ASTM D-790	psi(MPa)	24,500(169)
Thermal Class IEEE		°C	180
Flame Resistance—Ign	ASTM D-229 Method II	sec	75
Weight Loss(24 hours 250 °C)		%	5.4
Modulus of Elasticity in Flexural	ASTM D-790	psi	.13
Impact Strength IZOD(edge wise)	ASTM D-256	ft-lbs/in	11
Shear Strength	ASTM D-732	psi(MPa)	17,900(123)
Arc Resistance	ASTM D-495	sec	180
Dielectric Strength(Perp. 1/16", air)	ASTM D-149	V/mil(kV/mm)	400(15.6)

All of the information, suggestions, and recommendations 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 losses or damages.

DielectricStrength(Perp.1/16",oil)	ASTMD-149	kV	50
DielectricConstant(60Hz)	ASTMD-150		5.3
DissipationFactor(60Hz)	ASTMD-150		.015
InsulationResistance	ASTMD-229	Ohms	10x10 ¹⁵

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