



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## N200F (GPO-1)

<b>Item:</b>	<b>Grade N200F - Flexible Glass Polyester Laminate</b>			
<b>Description:</b>	<p>Grade N200F - Flexible Glass Polyester Laminate is a flexible, high-temperature, glass-mat, reinforced polyester (190°C at 1/32", 200°C at 1/16") designed for applications where high flexibility and excellent dielectric strength are necessary.</p> <p>Grade N200F has been designed for applications as a cost effective alternative to aramid paper in 220°C insulation systems, including layer and core insulation for dry-type transformers. Test data has shown that N200F can be used in any application having at least a bend radius of 2" (5 cm) without having significant negative effects on dielectric properties.</p>			
<b>Standards:</b>	NEMA LI-1: GPO-1 • IEC 60893: UPGM 201			
<b>Availability:</b>	<b>Laminate Sheets:</b>	Thickness:	English Units (in) 0.020 - 0.125	SI Units (mm/cm) 0.5 - 3 (mm)
		Sheet Size:	37 x 73, 49 x 97	94 x 185, 124 x 246 (cm)
	<b>Fabricated Parts:</b>	The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers.		

Key Characteristics	Test Method	Units - English (SI)	Typical Values
Standard Color	--	--	Natural/Taupe
Density	--	lbs/in (g/cc)	0.057 (1.57)
Water Absorption (0.125")	ASTM D-570	%	0.31
Tensile Strength	ASTM D-638	psi (MPa)	12,000 (83)
Compressive Strength, Flatwise	ASTM D-695	psi (MPa)	18,000 (124)
Flexural Strength	ASTM D-790	psi (MPa)	Lengthwise 20,000 (138)
			Crosswise 23,000 (159)
Thermal Class	UL 746B	°C	200*
Arc Resistance	ASTM D-495	Seconds	120
Dielectric Strength ( <u>1</u> 0.0652" in Oil)	ASTM D149 (short)	V/mil (kV/mm)	620 (24.4)

\* 190°C is the typical value for materials that are 1/16" and thinner

Data supplied above are typical values and are not to be considered specification values. 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 suitability of any material described herein for the contemplated application, 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.