



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

N220 - Class R - GPO-1

Item:	N220 - Class R GPO-1			
Description:	N220 is a specialty grade random glass mat, polyester resin, insulating material for high temperature NEMA GPO-1 applications. This material has a relative temperature index of 220°C (electrical) and 210°C (mechanical). It has excellent retention of physical and electrical properties at elevated temperatures.			
Standards:	NEMA LI-1: GPO-1 • IEC 60893: UPGM 201			
Availability:	Laminate Sheets:	Thickness:	English Units (in) 0.031 - 2.0 / 0.118 - 1.5	SI Units (mm) 0.78 - 50.8 / 3 - 38.1
		Sheet Size:	36 x 72 / 48 x 96	914 x 1828 / 1219 x 2438
	Fabricated Parts:	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 Beige
Density	--	lbs/in (g/cc)	0.061 (1.7)
Water Absorption (0.125")	ASTM D-570	%	0.25
Tensile Strength	ASTM D-638	psi (MPa)	11,000 (76)
Compressive Strength, Flatwise	ASTM D-695	psi (MPa)	32,000 (220)
Flexural Strength, Lengthwise	ASTM D-790	psi (MPa)	21,000 (145)
Bond Strength (0.50")	ASTM D-229	lbs (kg)	1,080 (490)
Shear Strength	ASTM D-732	psi (MPa)	12,000 (83)
IZOD Impact Strength, Edgewise	ASTM D-256	ft-lbs/in	11.0
Arc Resistance	ASTM D-495	Seconds	180
Dielectric Strength, Perpendicular in Oil (0.0625")	ASTM D-149	V/mil (kV/mm)	550 (21.7)
Breakdown Voltage, Parallel in Oil	ASTM D-149	kV	50
Relative Temperature Index	Electrical UL746B	°C	220
			Mechanical
UL File Number	--	--	E323105

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.