



THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

Item:	Class R GPO-1 (N220 from The Gund Company)		
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:		English Units (in)	SI Units (mm)
	Laminate Sheets:	Sheet Size:	36 x 72 48 x 96
		Thickness:	0.031 - 2.000 0.118 - 1.500
	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	--	--	Natural Beige
Density	--	lbs./in (g/cc)	0.061 (1.7)
Water Absorption (.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 (.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 <small>Perpendicular in Oil (.0625")</small>	ASTM D-149	V/mil (kV/mm)	550 (21.7)
Breakdown Voltage <small>Parallel Pin, in Oil</small>	ASTM D-149	kV	50
Relative Temperature Index	UL746E	°C	220 Electrical 210 Mechanical
UL File Number	--	--	E323105