



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

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## MATERIAL DATA SHEET

**Item:** **DuraNohl™ N220**

**Description:** **DuraNohl™ N220** is a specialty grader 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:** NEMALI-1 IEC60893  
 [GPO-1] [UPGM201]

English Units      SI Units

**Availability:** Laminate Sheets: Thickness: .031"-2"      0.78mm-50.8mm  
 Sheet Sizes: 36"x72"      92cmx183cm  
 48"x96"      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			Natural Beige
Density		Lbs/in <sup>3</sup> (g/cc)	.061(1.7)
Water Absorption, 1/8" thk	D-570	%	0.25
Tensile Strength	D-638	psi (MPa)	12,000(83)
Compressive Strength	D-695 (flatwise)	psi (MPa)	37,000(255)
Flexural Strength	D-790	psi (MPa)	24,000(166)
Bond Strength (1/2" thick)	D-229	lbs. (kg)	1,080(490)
Shear Strength	D-732	psi (MPa)	13,000(90)
Impact Strength IZOD (Edgewise)	D-256 (notched)	ft-lbs/in	11.0
Arc Resistance	D-495	Sec	180
Dielectric Strength (Perp. 1/16", oil)	D-149, (A-short)	V/mil (kV/mm)	550(21.7)
Breakdown Voltage (Parallel Pin, oil)	D-149, (stepped)	kV	50
Relative Temperature Index	UL746E	°C	220 Electrical / 210 Mech.

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