



MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS

INSULATING COMPONENTS FOR
POWER SYSTEMS EQUIPMENT

The Gund Company, Inc
St. Louis, Missouri – USA

TEL - 314.423.5200
FAX - 314.423.9009

MATERIAL DATA SHEET

Item: **DuraNohl™ N220**

Description: **DuraNohl™ 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 SI Units
0.031" to 2.0" 0.78 mm to 50.8 mm
Sheet Sizes: 36" x 72", 48" x 96" 92 cm x 183 cm, 122 cm x 244 cm

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 ³ (g/cc)	0.061 (1.7)
Water Absorption (.125")	ASTM D-570	%	0.25
Tensile Strength	ASTM D-638	psi (MPa)	12,000 (83)
Compressive Strength, Flatwise	ASTM D-695	psi (MPa)	37,000 (255)
Flexural Strength, Lengthwise	ASTM D-790	psi (MPa)	24,000 (166)
Bond Strength (.50")	ASTM D-229	lbs. (kg)	1,080 (490)
Shear Strength	ASTM D-732	psi (MPa)	13,000 (90)
Izod Impact Strength, Edgewise	ASTM D-256	ft.-lbs./in.	11.0
Arc Resistance	ASTM D-495	Seconds	180
Dielectric Strength, Perp., In Oil (.0625")	ASTM D-149	V/mil (kV/mm)	550 (21.7)
Breakdown Voltage, Parallel Pin, In Oil	ASTM D-149	kV	50
Relative Temperature Index	UL 746E	°C	220 Electrical 210 Mechanical
UL File Number	--	--	E323105

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 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 loss or damage.