



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## N220 - Class R - GPO-1

|                          |  |                    |                           |
|--------------------------|--|--------------------|---------------------------|
| <b>Item:</b>             | <b>N220 - Class R GPO-1</b>  |                    |                           |
| <b>Description:</b>      | 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. |                    |                           |
| <b>Standards:</b>        | NEMA LI-1: GPO-1 • IEC 60893: UPGM 201   |                    |                           |
| <b>Availability:</b>     | <b>Laminate Sheets:</b>  | English Units (in) | SI Units (mm)             |
|                          |  | Thickness:         | 0.031 - 2.0 / 0.118 - 1.5 |
|                          | Sheet Size:  | 36 x 72 / 48 x 96  | 914 x 1828 / 1219 x 2438  |
| <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 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<br>UL746B | °C                   | 220            |
|   |                      |                      | Mechanical     |
| UL File Number                                      | --                   | --                   | E323105        |

AS9100C Certified | ISO/AS9100 Certified QMS | RoHS Compliant | ITAR Compliant

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