



MANUFACTURERS OF  
ELECTRICAL INSULATION MATERIALS

INSULATING COMPONENTS FOR  
POWER SYSTEMS EQUIPMENT

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## MATERIAL DATA SHEET

**Item:** SG-200 High Temperature Glass Polyester

**Description:** SG-200 is a specialty grade random glass mat, polyester resin insulation material for high temperature applications. The material is rated at 210°C for electrical and mechanical applications. It has excellent retention of physical and electrical properties at elevated temperatures.

**Availability:** Molded Sheets: Thickness: 

English Units	SI Units
0.032" to 2.0"	0.8 mm to 50.8 mm
Sheet Sizes: 36" x 72", 48" x 96"	94 cm x 185 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	--	--	Tan
Specific Gravity	ASTM D-792	lbs./in <sup>3</sup> (g/cc)	0.061 (1.70)
Water Absorption (.125")	ASTM D-570	%	0.3
Tensile Strength	ASTM D-638	psi (MPa)	12,500 (86)
Compressive Strength, Flatwise	ASTM D-695	psi (MPa)	36,000 (248)
Flexural Strength, Lengthwise	ASTM D-790	psi (MPa)	29,000 (200)
Maximum Operating Temperature	--	°F (°C)	410 (210)
Shear Strength	ASTM D-732	psi (MPa)	11,100 (77)
Dissipation Factor, MHz 60 Hz	ASTM D-150	--	0.013 0.37
Arc Resistance	ASTM D-495	Seconds	180
Dielectric Strength, Short Time, In Oil	ASTM D-149	V/mil (kV/mm)	625 (24.4)
Dielectric Strength, Short Time, In Air	ASTM D-149	V/mil (kV/mm)	500 (19.5)
Insulation Resistance	ASTM D-257	Ohm x 10 <sup>12</sup>	145.0
Permittivity, MHz 60 Hz	ASTM D-150	--	3.7 4.6

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.