



MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS

INSULATING COMPONENTS FOR
POWER SYSTEMS EQUIPMENT

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

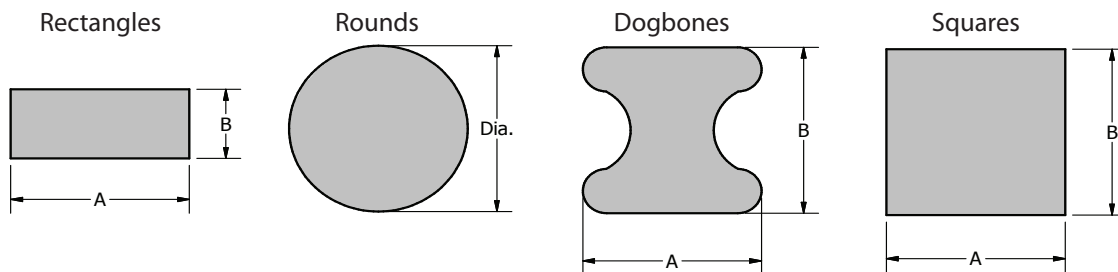
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MATERIAL DATA SHEET

Item: Glass Polyester Solid Rod & Bar Products

Description: Glass Polyester Solid Bar & Rod Products are fiberglass-reinforced thermoset polyester shapes that exhibit properties desirable for a wide range of structural and electrical applications. Common shapes include Rounds, Squares, and “Dogbones.”

Availability: 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)	155°C Polyester	220°C Polyester
Standard Color	--	--	White/Tan	Gray
Ultimate Tensile Strength	ASTM D-638	psi (MPa)	70,000 (483)	70,000 (483)
Flexural Strength, Flatwise Crosswise	ASTM D-790	psi (MPa)	25,000 (172) 15,000 (103)	35,000 (241) 20,000 (138)
Flexural Modulus, Flatwise Crosswise	ASTM D-790	ksi (MPa)	2 x 10 ⁶ (13,790) 1.5 x 10 ⁶ (10,342)	2.5 x 10 ⁶ (17,237) 2.0 x 10 ⁶ (13,790)
Impact Strength	ASTM D-256	ft.lb./in.	50	50
Compressive Strength, Flatwise Lengthwise	ASTM D-695	psi (MPa)	20,000 (138) 40,000 (276)	20,000 (138) 40,000 (276)
Dielectric Strength, Perpendicular Parallel	ASTM D-149	Vpm (kV/mm) kV/in.	300 (11.7) 50	300 (11.7) 50
Power Factor, 60 Hz	ASTM D-150	--	0.03	0.03
Dielectric Constant, 60 Hz	ASTM D-150	--	5.0	5.0
Arc Resistance	ASTM D-495	Seconds	100	120
Thermal Coefficient of Expansion	ASTM D-696	in./in./°F	3 x 10 ⁻⁶	3 x 10 ⁻⁶
Thermal Conductivity	--	BTU/hr./sq.ft./in.°F	4	4
Weight Loss, 200 hrs. at 150°C 200 hrs. at 200°C	--	%	1.0 6.1	0.17 0.75
Extractables in Freon 22	--	%	1.05	0.19
Specific gravity	ASTM D-792	--	1.95	1.95
Water Absorption	ASTM D-349	%	0.3	0.3

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.