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: NEMA G-11, Glass Epoxy Laminate Grade G-11TM

Description: NEMA Grade G-11 is a high-pressure laminate manufactured from a glass cloth substrate impregnated with a high temperature epoxy resin system. NEMAG-11TM has a temperature rating of 180°C (Class H), while standard NEMA G-11 is Class F material. NEMA G-11 is non-brominated, halogen-free material and thus safe to use in rotating equipment.

Standards:

NEMA LI-1	Grade G-11
IEC 60893	EP GC 203, EP GC 308
MIL-I-24768	/ 3 - GEB

Availability:

		English Units	SI Units
Laminate Sheets:	Thickness:	.010” to 4.0”	0.2 mm to 101.6 mm
	Sheet Sizes:	Up to 48” x 120”	Up to 122 cm x 305 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	--	--	Green
Density	ISO 1183/A	g/cc	2.0
Thermal Endurance	IEC 216	°C	180
Moisture Absorption (.394”)	ISO 62/1	%	0.05
Tensile Strength (.125”)	ISO 527	psi (MPa)	34,800 (240)
Compressive Strength, Flatwise	ISO 604	psi (MPa)	72,500 (500)
Flexural Modulus (.125”) LW CW	ISO 178	ksi (MPa)	4,200 (28,957) 4,000 (27,579)
Flexural Strength, 23°C 120°C 150°C	ISO 178	psi (MPa)	58,823 (400) 46,650 (280) 33,300 (200)
Dielectric Strength, Perp. at 90°C	IEC 243	V/mil	330
Breakdown Voltage, Perp. at 90°C	IEC 243	kV	40

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.