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 Grade G-5 / G-9 Glass Melamine Laminate

Description: NEMA Grade G-5 / G-9 material is a glass based laminate with a melamine resin binder. Glass melamine insulating materials offer high mechanical strength and arc resistance. These grades find application as electric furnace insulation, circuit breaker parts, switchboard panels, and arc barriers. Also available in tubing.

Standards:

NEMA LI-1	Grade G-7, G-9
IEC 60893	MF GC 201
MIL-I-24768	/ 8 - GME, / 1 - GME

Availability:

		English Units	SI Units
Laminate Sheets:	Thickness:	.008” to 4.0”	0.2 mm to 101.6 mm
	Sheet Sizes:	36” x 48”, 39” x 48”	91.4 cm x 122 cm, 99 cm x 122 cm
		36” x 72”, 48” x 48”	91.4 cm x 182.2 cm, 122 cm x 122 cm
		48” x 96”, 48” x 108”	122 cm x 243.8 cm, 122 cm x 274.3 cm

Convolute Tubing: Available in an infinite number of inner diameter and outer diameter combinations as per customer drawings

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	--	--	Grey
Rockwell Hardness (.062”)	--	M Scale	115
Moisture Absorption (.062”)	ASTM D-570	%	0.60
Tensile Strength (.125”) LW CW	ASTM D-638	psi (MPa)	44,000 (303) 34,000 (234)
Flexural Strength (.062”) LW CW	ASTM D-790	psi (MPa)	61,600 (424) 51,100 (352)
IZOD Impact Strength LW CW	ASTM D-256	Ft.-lbs./in	12.5 8.5
Arc Resistance (.125”)	ASTM D-495	Seconds	185
Compressive Strength, Flatwise (.50”)	ASTM D-695	psi (MPa)	70,000 (482)
Flammability Rating	UL 94	--	V-O
Breakdown Voltage, Condition A (.062) Condition D	ASTM D-149	kV	65 55
Dielectric Strength, Condition A (.062”) Condition D	ASTM D-149	V/mil	450 400
Permittivity (.062”)	ASTM D-24/23	--	7.03
Dissipation Factor (.062”)	ASTM D-24/23	--	0.015
Comparative Tracking Index (.125”)	ASTM D-3638	--	600+

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.