MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS

INSULATING COMPONENTS FOR POWER SYSTEMS EQUIPMENT

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MATERIAL DATA SHEET

Item: NEMA Grade G-7 Glass Silicone Laminate

Description: NEMA Grade G-7 materials are glass based laminates with a silicone resin binder. Glass silicone insulating materials offer excellent thermal resistance (up to 250°C) 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
IEC 60893	SI GC 201
MIL-I-24768	/ 17 - GSG

Availability:

Laminate Sheets:

	English Units	SI Units
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

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	--	--	White
Rockwell Hardness (.062”)	--	M Scale	100
Moisture Absorption (.062”)	ASTM D570, A	%	0.19
Flexural Strength (.25”) LW CW	ASTM D790, A	psi (MPa)	18,000 (124) 15,000 (103)
IZOD Impact Strength LW CW	ASTM D256, A	ft.-lbs./in.	17.0 8.5
Arc Resistance (.125”)	ASTM D495, A	Seconds	200
Compressive Strength, Flatwise	ASTM D695, A	psi (MPa)	45,000 (310)
Flammability Rating	UL 94	Class	V-0
Breakdown Voltage (.062) (Borth Parallel Step Method)	ASTM D149, A ASTM D149, D-48/50	kV	55 34
Dielectric Strength	ASTM D149, A	V/mil.	350
Permittivity (.062”)	D-150, D-24/23	--	4.34
Dissipation Factor (.062”)	D-150, D-24/23	--	0.0017

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.