

G-7 Glass Silicone Phenolic

Grade G-7 Glass silicone is a continuous glass fabric laminated with a silicone resin. Among phenolics, it is unequalled for high heat and arc resistance applications, and where good mechanical and electrical properties must be exhibited in humid conditions in excess of 500°F. It is designated by MIL-I-24768/17 Type GSG and the NEMA grade is G-7.

Property	Units	G-7 Glass Silicone Phenolic
Physical		
Specific Gravity		1.78
Water Absorption - 24 Hrs	%	0.02
Mechanical		
Tensile Strength	psi	18,000
Compressive Strength	psi	45,000
Flexural Strength	psi	25,000
Hardness, M Scale		105
Bond Strength	lbs	900
Shear Strength	lbs	17,000
Electrical		
Dissipation Factor 106 Cycles, Cond.A		0.003
Dielectric Constant 106 Cycles, Cond.A		4.2
Electric Strength Cond.A	V/mil	400
Thermal		
Flammability Rating UL94		V-0
Maximum Operating Temperature	°F	428
Coeff. Thermal Exp.	in/in/°F	0.55 x 10 ⁻⁵

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.