



DATA SHEET: GER3002 RESIN and GEH4007 HARDENER EPOXY

Description: GER3002 Resin and GEH4007 Hardener is a two component filled epoxy with low viscosity and good flow qualities. The low viscosity helps aid in the filling of difficult void areas and releasing of air bubbles. It has great-encapsulated properties for potting of electrical components, excellent mechanical properties, great adhesion, good chemical and environmental resistance, good thermal shock resistance and very low shrinkage. It has low exotherm during cure for filling large mass voids. It has excellent adhesion to metals, plastics and ceramics. Cures to a flexible state and can be used for “cut-away” repair of parts.

Uses: Potting electrical components, encapsulating, power supplies, marine devices, also applications where “cut-away” is required.

Glenmarc epoxies have been the industry standard for potting of electrical components for over 20 years. They have been used in a multitude of electrical potting assemblies such as automotive, aerospace, military, and industrial components.

Mixing and Cure Instructions:

Ratio by weight: Resin 100 Hardener 50
Ratio by volume: Resin 1.2 Hardener 1
Pot life (100 gram mass at 72°F) = 70 minutes

Physical Properties (@ 72°F/ 22°C):

Color	Available in Black or White
Shore “A” hardness ASTM D2240	70
Viscosity Resin	24,000 cps
Viscosity Hardener	2,700 cps
Viscosity Mixed	4,160 cps
Density Resin	13.3 wpg
Density Hardener	8.02 wpg
Density mixed	11.53 wpg
Specific gravity, Resin	1.60
Specific gravity, Hardener	0.96
Specific gravity mixed	1.38
Tensile strength	1000 psi
Compressive strength	340 psi
Cure shrinkage	0.002 inches (0.0508mm)
Coefficient of Thermal Expansion	11x10(-5) in/in/°F
Temperature use range	-50°F (130°C) to 250°F (121°C)
Shelf Life	1-1/2 Years

Electric Properties:

Volume Resistivity, applied voltage:500VDC@1 min. Ele per ASTM D257	2.0X10(15) ohms-cm
Dielectric Constant, test frequency 1Mhz per ASTM D150	4.15
Dielectric Strength oil rate of rise (short time); 500 v/s per ASTM D149	440 v/mil
Dissipation Factor test frequency: 1MHZ per ASTM D150	0.020
Thermal conductivity BTU-in/hr ft sq-F° per ASTM C177	5.85

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