



DATA SHEET: GER3004 RESIN and GEH4008 HARDENER EPOXY

Description: GER3004 Resin and GEH4008 Hardener is a two component unfilled 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 very 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 100
Ratio by volume: Resin 1 Hardener 1.14
Pot life (100 gram mass at 72°F) = 180-240 minutes

Physical Properties (@ 72°F/ 22°C):

Color	Available in Black or Clear
Shore “A” hardness ASTM D2240	40
Viscosity Resin	900 cps
Viscosity Hardener	4,100 cps
Viscosity Mixed	1,800 cps
Density Resin	9.20 wpg
Density Hardener	8.07 wpg
Density mixed	8.80 wpg
Specific gravity, Resin	1.10
Specific gravity, Hardener	0.96
Specific gravity mixed	1.06
Tensile strength	100 psi
Elongation	45%
Cure shrinkage	0.002 inches (0.0508mm)
Coefficient of Thermal Expansion	5.7x10(-6) 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	540 v/mil
Dissipation Factor test frequency: 1MHZ per ASTM D150	0.026
Thermal conductivity BTU-in/hr ft sq-F° per ASTM C177	1.65

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