



DATA SHEET: GER3000 RESIN and GEH4004 HARDENER

Description: GER3000 Resin and GEH4004 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.

Uses: Potting electrical components, encapsulating, power supplies, etc.

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 80
Ratio by volume: Resin 1 Hardener 1
Pot life (100 gram mass at 72°F) = 40 minutes

Physical Properties (@ 72°F/ 22°C):

Color	Available in Black or Clear
Shore "D" hardness ASTM D2240	80
Viscosity Resin	13,000 cps
Viscosity Hardener	1,600 cps
Viscosity Mixed	4,000 cps
Density Resin	9.78 wpg
Density Hardener	8.06 wpg
Density mixed	9.00 wpg
Specific gravity, Resin	1.17
Specific gravity, Hardener	0.97
Specific gravity mixed	1.08
Tensile strength	3000 psi
T-Peel strength	29 pli
Coefficient of Thermal Expansion	40x10(-8) mm/mm°C
Maximum use temperature	225°F (107°C)
Deflection temperature	150°F (66°C)
Shelf Life	1-1/2 Years

Electric Properties:

Volume Resistivity, applied voltage:500VDC@1 min. Ele per ASTM D257	6.3X10(15) ohms-cm
Dielectric Constant, test frequency 1Mhz per ASTM D150	5.41
Dielectric Strength oil rate of rise (short time); 500 v/s per ASTM D149	450 v/mil
Dissipation Factor test frequency: 1MHZ per ASTM D150	0.030
Thermal conductivity BTU-in/hr ft sq-F° per ASTM C177	1.70

Notice: This information is presented to assist the user in determining whether our products are suitable for his intended use. The user assumes all risks and liability in connection therewith. No warranty or representation express or implied shall apply to these products. Seller's only obligation shall be to replace quantity of this product which has proven to not substantially comply with the data presented. Seller shall not be responsible for property loss or damage direct or consequential arising out of use of this product(s) or inability to use this product(s). See material safety data sheet before using.