



G6E-HTSG™ HIGH TEMPERATURE SILVER-GRAPHENE ELECTRICALLY CONDUCTIVE EPOXY

Technical Data Sheet

DESCRIPTION: G6E-HTSG™ epoxy is primarily developed for applications requiring a high-performance bond or connection of electrically conductive components/materials which operate at higher temperatures and which require low electrical resistivity. G6E-HTSG™ epoxy is formulated with proprietary nanomaterials and fillers. G6E-HTSG™ epoxy has good electrical conductivity. G6E-HTSG™ epoxy incorporates a proprietary graphene additive to enhance crack resistance. A heating oven is required for curing. Uses for G6E-HTSG™ epoxy include electronics, embedded electrical heater manufacture and repair, etc.

FEATURES:

- Higher Glass Transition & Operating Temperature
- Silver-Graphene Filled (Non-Magnetic)
- Excellent Electrical Conductivity
- Graphene Loaded (Improves Cracking Resistance)
- Wide Temperature Operation (Cracking Resistant)

TYPICAL APPLICATIONS:

- Electronics operated or exposed to High Temperature
- Embedded Electrical Heaters
- EMI / RFI Shielding
- Electrical Sensors / Transducers
- Solder Replacement

SPECIFICATIONS:

TWO COMPONENT SYSTEM: Part A – smooth dark grey paste
Part B – smooth thixotropic silver paste

MIX RATIO: 100 (Part A) to 50 (Part B) by weight.

POT LIFE: 4 hours

CURING SCHEDULE: Best results are obtained when product is cured at 4 hours @ 150°C / 302°F.
Post cure for 1–2 hours @ 180°C / 356°F for optimum properties.

DENSITY: Part A 3.1–3.3 g/cm³
Part B 3.0–3.2 g/cm³

MIXED VISCOSITY: 290 to 310 Pa·s @ 25°C / 77°F

OPERATING TEMPERATURE: up to 316°C / 600°F

GLASS TRANSITION

Disclaimer: The information provided is based on data and tests believed to be accurate. Graphene Laboratories, Inc. makes no warranties (expressed or implied) as to accuracy and assumes no liability in connection with any use of this product.



TEMPERATURE (T_g): 129°C / 264°F

HARDNESS, SHORE: >80 D

VOLUME RESISTIVITY: 0.0005 Ω·cm

MIXING INSTRUCTIONS: Stir both components before use. Add Part B to Part A and mix slowly until uniform in a separate container.

STORAGE & SHELF LIFE: 12 months @ 25°C / 77°F in unopened, unmixed containers. Stores and ships at room temperature. No freezing is required.

SHIPPING & HANDLING: Always read both SDS before use. Use product with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin.

ABOUT G6-EPOXY™: All G6-EPOXY™ specifications are for normal use and routine applications. Please consult with our team to ensure the most appropriate selection of G6-EPOXY™ products. Depending upon your application requirements, a custom G6-EPOXY™ formulation may be available.

G6-EPOXY™ is a trademark owned by Graphene Laboratories, Inc.

G6-EPOXY™
Graphene Laboratories, Inc.
760 Koehler Avenue, Suite 2
Ronkonkoma, NY 11779
USA

Web Address: <https://g6-epoxy.com>
Phone: 631-405-5115
Fax: 781-287-1248
Email: support@graphenelab.com

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