



G6E-SG™ GENERAL PURPOSE SILVER-GRAPHENE ELECTRICALLY CONDUCTIVE EPOXY

Technical Data Sheet

DESCRIPTION: G6E-SG™ epoxy is developed for general purpose applications requiring high-performance bond or connection of electrically conductive components/materials that require low electrical resistivity. G6E-SG™ is formulated with proprietary nanomaterials and fillers. G6E-SG™ epoxy has good electrical conductivity. A heating oven is recommended for faster curing times. Uses for G6E-SG™ epoxy include photovoltaic cells, EMI / RFI shielding, medical device assembly and repair, etc.

FEATURES:

- Silver-Graphene Filled (Non-Magnetic)
- Excellent Electrical Conductivity
- Resistant to Temperature Variations
- Graphene Loaded (Improves Cracking Resistance)
- Room Temperature / Oven Curable

TYPICAL APPLICATIONS:

- Photovoltaic (Solar) Cells
- Casting, Coating & Encapsulation
- EMI / RFI Shielding
- Display Packaging / Bonding
- Medical Devices / Sensors
- Solder Replacement

SPECIFICATIONS:

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

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

POT LIFE: 3 hours

CURING SCHEDULE: Best results are obtained when the product is cured at one of the following schedules:
24 hours @ 25°C / 77°F
3 hours @ 80°C / 176°F
1 hour @ 150°C / 302°F

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

MIXED VISCOSITY: 110 to 120 Pa·s @ 25°C / 77°F

GLASS TRANSITION TEMPERATURE (T_g): 90°C / 194°F

HARDNESS, SHORE: >70 D

VOLUME RESISTIVITY: ~0.0001 Ω·cm

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.



- 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 standard use and for 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.

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G6E-SG TDS Rev. 1 – 08/2018

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