



G6E-P™ GENERAL PURPOSE CARBON-FILLED ELECTRICALLY CONDUCTIVE EPOXY

Technical Data Sheet

DESCRIPTION: G6E-P™ epoxy is primarily developed for general purpose applications requiring high-performance bond or connection of electrically conductive components/materials. G6E-P™ is formulated with proprietary nanomaterials and fillers. G6E-P™ epoxy can be cured at room temperature. A heating oven is suggested for faster curing times. G6E-P™ epoxy is low cost as compared to the silver epoxy. Uses for G6E-P™ epoxy include photovoltaic cells, EMI / RFI shielding, medical device assembly and repair, etc.

FEATURES:

- Carbon Filled (Non-Metallic & Non-Magnetic)
- Low Cost, Low Density
- Electrically Conductive
- Resistant to Temperature Variations
- Impact / Shock Resistant
- Corrosion Resistant
- Room Temperature / Oven Curable (depending upon desired cure time)

TYPICAL APPLICATIONS:

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

SPECIFICATIONS:

TWO COMPONENT SYSTEM: Part A – smooth thick black paste
Part B – black liquid

MIX RATIO: 100 (Part A) to 32 (Part B) by weight.

POT LIFE: 2 hours

CURING SCHEDULE: Best results are obtained when the product is cured at one of the following schedules:
24 hours @ 25°C / 77°F
5 hours @ 80°C / 176°F
2 hours @ 120°C / 248°F

DENSITY: Part A 1.0 – 1.1 g/cm³
Part B 1.0 – 1.1 g/cm³

MIXED VISCOSITY: 145 to 155 Pa.s @ 25°C / 77°F

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.



GLASS TRANSITION
TEMPERATURE (T_g): 73°C / 163°F
HARDNESS, SHORE: >80 D
VOLUME RESISTIVITY: ~5 Ω·cm

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

STORAGE & SHELF LIFE: 6 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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