



# G6-EPOXY™

## NANOCARBON ELECTRICALLY CONDUCTIVE EPOXY

### G6E-P™

**DESCRIPTION:** G6E-P™ epoxy is primarily developed for general purpose applications requiring high performance bond or connection of electrically conductive components/materials.

We use a proprietary mix of high-performance carbon filler to achieve superb electrical properties for a non-metallic electrically conductive epoxy. Operating temperature is up to 120°C/257°F.

#### FEATURES:

- Non-magnetic; carbon filled
- Good electrical resistivity: <10 Ohm·cm
- Low Cost, Low Density
- Excellent gap-filling adhesive
- Impact / Shock Resistant

#### TYPICAL APPLICATIONS:

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

#### SPECIFICATIONS OF UNCURED MATERIAL:

TWO COMPONENT SYSTEM:

Part A – smooth black paste  
Part B – smooth black paste

MIX RATIO:

100 (Part A) to 50 (Part B) by weight

WORKING TIME:

2 - 3 hours

CURING SCHEDULE:

24 hours @ 25°C / 77°F or  
3 hours @ 80°C / 176°F  
45 min @ 150°C / 302°F

DENSITY:

Part A 1.0 - 1.2 g/cm<sup>3</sup>  
Part B 1.0 - 1.1 g/cm<sup>3</sup>

MIXED VISCOSITY:

450 - 550 Pa·s @ 25°C / 77°F  
gap plates = 900 μm, oscillation rate = 1.25 s<sup>-1</sup>



**G6-EPOXY™**

**SPECIFICATIONS OF CURED MATERIAL:** cured at 80°C/176 °F

HARDNESS, SHORE:	> 70 D
GLASS TRANSITION TEMPERATURE (Tg):	62°C / 153°F
FLEXURAL MODULUS	2.5 - 3.5 GPa at 25°C
LOSS MODULUS	120 - 250 MPa at 25°C
VOLUME RESISTIVITY:	<10 Ω·cm

**GENERAL INFORMATION:**

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.**

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