



G6-EPOXY™

SILVER-GRAPHENE ELECTRICALLY CONDUCTIVE EPOXY

G6E-SG™

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.

Graphene fillers add superior durability, fatigue, and crack resistance along with low electrical resistance.

Operating temperature is up to 120 °C.

FEATURES:

- Silver-Graphene Filled (Non-Magnetic)
- Excellent Electrical Conductivity
- Tough and Durable
- Room Temperature / Oven Curable (depending upon desired cure time)

TYPICAL APPLICATIONS:

- Wearable Electronics
- EMI / RFI Shielding
- PCB Manufacture / Repair
- Photovoltaic Cell Packaging
- Solder Replacement

SPECIFICATIONS OF UNCURED MATERIAL:

TWO COMPONENT SYSTEM:

Part A – smooth silver paste

Part B – smooth silver paste

MIX RATIO:

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

POT LIFE:

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 2.9 - 3.0 g/cm³

Part B 2.7 - 2.9 g/cm³

MIXED VISCOSITY:

110 - 150 Pa·s @ 25°C / 77°F



G6-EPOXY™

SPECIFICATIONS OF CURED MATERIAL:

HARDNESS, SHORE:	> 70 D
GLASS TRANSITION TEMPERATURE (Tg):	75°C/ 167 °F (cured at 80°C/176 °F)
FLEXURAL MODULUS	250 - 500 MPa at 25°C
LOSS MODULUS	160 - 300 MPa at 25°C
VOLUME RESISTIVITY:	<0.0007 Ω-cm (cured at 80°C/176 °F) <0.0002 Ω-cm (cured at 150°C/302 °F)

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.

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

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