



## G6E-RTSG™ ROOM TEMPERATURE CURABLE SILVER-GRAPHENE ELECTRICALLY CONDUCTIVE EPOXY

### *Technical Data Sheet*

**DESCRIPTION:** G6E-RTSG™ epoxy is developed primarily for applications that require curing at room temperature. Room temperature curing eliminates the necessity for a heating oven. This allows easier and safer bond/connection of conductive components or materials. G6E-RTSG™ epoxy is also formulated with proprietary nanomaterials and fillers to provide low electrical resistivity. G6E-RTSG™ epoxy also incorporates a proprietary graphene additive to enhance the crack resistance of the epoxy adhesive.

G6E-RTSG™ epoxy has outstanding electrical conductivity and is ideal for applications involving manufacture or repair of conductive and temperature sensitive components. Uses for G6E-RTSG™ epoxy include cold solder replacement applications, printed circuit board, EMI / RFI shielding assembly/repair, etc.

#### **FEATURES:**

- Room Temperature Curable
- Excellent Electrical Conductivity
- Graphene Loaded (Improves Cracking Resistance)
- Wide Temperature Operation (Cracking Resistant)

#### **TYPICAL APPLICATIONS:**

EMI / RFI Shielding  
PCB Manufacture / Repair  
Photovoltaic Cell Packaging  
Temperature Sensitive  
Electronics Bonding  
Household Electronics Repair  
Display Packaging / Bonding

#### **SPECIFICATIONS:**

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

**MIX RATIO:** 100 (Part A) to 20 (Part B) by weight.

**POT LIFE:** 15 min

**CURING SCHEDULE:** Best results are obtained when the product is cured at one of the following schedules:  
4 hours @ 25°C / 77°F  
30 minutes @ 60°C / 140°F  
10 minutes @ 150°C / 302°F

**DENSITY:** Part A 3.1 – 3.2 g/cm<sup>3</sup>  
Part B 3.0 – 3.2 g/cm<sup>3</sup>

**MIXED VISCOSITY:** 440 Pa·s @ 25°C / 77° and 93 Pa·s @ 50°C / 122°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.



TACK-FREE TIME: 1 hour

GLASS TRANSITION TEMPERATURE (T<sub>g</sub>): 96°C / 205°F (when cured at 60°C / 140°F)

HARDNESS, SHORE: >85 D

VOLUME RESISTIVITY: 0.003 Ω·cm when cured at Room Temperature  
0.0001 Ω·cm when cured at 150°C / 302°F

**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:** 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 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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