



G6E-FXNS™ FLEXIBLE SILVER-CARBON ELECTRICALLY CONDUCTIVE EPOXY

Technical Data Sheet

DESCRIPTION: G6E-FXNS™ epoxy is developed for applications requiring a high-performance flexible bond or connection of electrically conductive components/materials as well as for low electrical resistivity. G6E-FXNS™ is developed based on advanced proprietary technology that requires 20% or less silver content to be at par with leading silver-based epoxies in terms of electrical properties. This improvement not only reduces the cost of the material but also makes G6E-FXNS™ less prone to fracture, thus allowing for stronger adhesion to the target substrate. A heating oven is required for curing. Uses for G6E-FXNS™ epoxy include flexible circuits, medical sensor assembly and repair, etc.

FEATURES:

- Flexible (after curing)
- Silver-Carbon Filled (Non-Magnetic)
- Very Good Electrical Conductivity
- Impact / Shock Resistant
- Tough and Durable
- Low Cost, Low Density

TYPICAL APPLICATIONS:

- Wearable Electronics
- Medical Sensors
- Fiber-Optics Packaging
- Flexible Electronics, Wiring & Harnesses
- Solder Replacement

SPECIFICATIONS:

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

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

POT LIFE: 1 hour

CURING SCHEDULE: Best results are obtained when product is cured at 1 hour @ 150°C / 302°F

DENSITY: Part A 2.15–2.30 g/cm³
Part B 2.30–2.40 g/cm³

MIXED VISCOSITY: 210 to 220 Pa·s @ 25°C / 77°F

GLASS TRANSITION TEMPERATURE (T_g): 26°C / 79°F

HARDNESS, SHORE: >75 A

VOLUME RESISTIVITY: 0.003 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:** 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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PATENT PENDING

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