

HIGH -TEMPERATURE SILVER-NANOCARBON ELECTRICALLY CONDUCTIVE EPOXY

G6E-HTNS™

DESCRIPTION: G6E-HTNS™ epoxy is primarily developed for applications requiring a high-performance bond or connection of electrically conductive components/materials which operate at higher temperatures and require low electrical resistivity. **Operating temperature is up 315°C/600°F.**

FEATURES:

- Higher Glass Transition & Operating Temperature
- Excellent Electrical Conductivity
- Low Viscosity, low density
- Wide Temperature Operation

Our G6E-NS series of epoxies were developed with advanced proprietary technology requiring reduced silver content while performing on par with leading silver based epoxies in terms of electrical properties. This innovation makes G6E-HTNS less dense, and allows for stronger adhesion to the target substrate.

TYPICAL APPLICATIONS:

- Electronics operated or exposed to High Temperature
- Embedded Electrical Heaters
- EMI / RFI Shielding
- Electrical Sensors / Transducers
- Solder Replacement

SPECIFICATIONS OF UNCURED MATERIAL:

TWO COMPONENT SYSTEM:

Part A – smooth gray paste
Part B – smooth silver paste

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

POT LIFE: 4 hours

CURING SCHEDULE: 2 hours @ 150°C / 302°F or 1 hour @ 180°C / 356°F

DENSITY: Part A 1.5-2.0 g/cm³
Part B 2.6-2.8 g/cm³

rait b 2.0-2.0 g/cm

MIXED VISCOSITY: 170-270 Pa·s @ 25°C / 77°F



SPECIFICATIONS OF CURED MATERIAL:

HARDNESS, SHORE:

> 83 D

GLASS TRANSITION TEMPERATURE (Tg):

140°C / 284°F (cured at 150°C/302°F)

FLEXURAL MODULUS

145-300 MPa at 25°C

LOSS MODULUS

4.0-5.0 GPa at 25°C

VOLUME RESISTIVITY:

<0.003 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™

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