G6-EPOXY™

FLEXIBLE SILVER-GRAPHENE ELECTRICALLY CONDUCTIVE EPOXY

G6E-FXSG™

DESCRIPTION: G6E-FXSG™ epoxy is primarily developed for applications requiring a high-performance flexible bond or connection of electrically conductive components/materials requiring low electrical resistivity. G6E-FXSG™ is well suited for bonding of dissimilar materials that are likely to be subjected to vibrations, temperature variations, shock from impact, bending, and mechanical stress.

We use a proprietary mix of silver and graphene materials to formulate an adhesive with an outstanding combination of flexibility and 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:

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

TYPICAL APPLICATIONS:

- Wearable Electronics
- Medical Sensors
- Fiber-Optics Packaging
- Flexible Electronics, Wiring & Harnesses
- 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 100 (Part B) by weight
POT LIFE:	1 - 2 hours
CURING SCHEDULE:	24 hours @ 25°C / 77°F or 2 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 - 125 Pa·s @ 25°C / 77°F

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SPECIFICATIONS OF CURED MATERIAL:

HARDNESS, SHORE:	> 40 A
GLASS TRANSITION TEMPERATURE (Tg):	28 °C/ 82 °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:	<0.001 Ω·cm (cured at 80°C/176 °F) <0.0005 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™
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