G6E–RTC™ ROOM TEMPERATURE CURABLE CARBON FILLED ELECTRICALLY CONDUCTIVE EPOXY

Technical Data Sheet

DESCRIPTION: G6E–RTC™ Room Temperature Curable Carbon Filled Electrically Conductive epoxy is developed primarily for applications requiring curing at room temperature. G6E–RTC™ epoxy is formulated with proprietary nanomaterials and fillers to provide its performance characteristics. Room temperature curing eliminates the use of a heating oven during curing to allow easier and safer connection of conductive components or materials. G6E–RTC™ epoxy is an ideal choice for applications involving heat sensitive substrates.

G6E–RTC™ epoxy is low cost (compared with silver), non–metallic and has good electrical conductivity. G6E–RTC™ epoxy is ideal for applications involving manufacture or repair of conductive and temperature sensitive components. Uses for G6E–RTC™ epoxy include printed circuit board, EMI/ RFI shielding assembly and repair, etc.

FEATURES:

- Room Temperature Curable
- Carbon Filled (Non–Metallic / Non–Magnetic)
- Low–Cost (as an alternative to silver–based epoxies)
- Low Density
- Very Good Electrical Conductivity
- Corrosion Resistant

TYPICAL APPLICATIONS:

- Photovoltaic (Solar) Cells
- Casting, Coating & Encapsulation
- Temperature Sensitive Electronics
- Medical Devices
- EMI / RFI Shielding
- Cold Solder Replacement

SPECIFICATIONS:

TWO COMPONENT SYSTEM: Part A – smooth black paste
Part B – smooth black 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 @ 22°C / 72°F
30 minutes @ 60°C / 140°F
10 minutes @ 150°C / 302°F

DENSITY: Part A 1.0 – 1.1 g/cm^3
Part B 1.0 – 1.1 g/cm^3

MIXED VISCOSITY: 500 Pa·s @ 25°C / 77°F
320 Pa·s @ 50°C / 122°F

TACK–FREE TIME: 1 hour

GLASS TRANSITION TEMPERATURE (Tg): 74°C / 165°F (when cured at 60°C / 140°F)

HARDNESS, SHORE: > 65 D

VOLUME RESISTIVITY: ~15 Ω·cm

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.

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