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|-----------------------|------------------------------|-----------------------------------|------------|
| Number of Components: | Two | Minimum Bond Line Cure Schedule*: | |
| Mix Ratio By Weight: | 100:10 | 150°C | 1 Minute |
| Specific Gravity: | | 100°C | 10 Minutes |
| Part A | 1.15 | | |
| Part B | 1.02 | | |
| Pot Life: | 6 Hours | | |
| Shelf Life: | One year at room temperature | | |

*Note: Container(s) should be kept closed when not in use. *Please see Applications Note available on our website.
- TOTAL MASS SHOULD NOT EXCEED 25 GRAMS -*

Product Description:

EPO-TEK[®] 360 is a two component, high-temperature grade epoxy for semiconductor, electronics, fiber optics and medical applications.

EPO-TEK[®] 360 Advantages and Application Notes:

- Built in color change from clear to amber when cured properly. The color change can be used for in-line inspection of epoxy joints and adhesive fillet.
- Unfilled epoxy resin allows for % transmission in the VIS and NIR to be realized.
- Low viscosity allows for wicking and capillary action.
- Suggested Applications:
 - Semiconductor: capillary flow underfill for Flip Chip mounted die
 - Fiber Optic: polarizing maintaining fibers (PMF) found in gyroscope coils; fiber termination into ferrule.
 - Medical: impregnation into fiber optic light guides and endoscopes; resist autoclave, ETO, or gamma sterilization.
 - Electronics: impregnating copper coil windings found in motors or SMD inductor coils; adhesion to ferrite cores
- Featured inside Technical Paper #11 titled "Significance of Glass Transition Temperature on Epoxy Resins for Fiber Optic Applications" - <http://www.epotek.com/technical-papers.asp>

Typical Properties: (To be used as a guide only, not as a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results; Cure condition: 150°C/1 hour; * denotes test on lot acceptance basis)

| Physical Properties: | |
|---|--|
| *Color: Part A: Clear/Colorless Part B: Amber | Die Shear Strength @ 23°C: ≥ 10 Kg / 3,400 psi |
| *Consistency: Pourable liquid | Degradation Temp. (TGA): 375°C |
| *Viscosity (@ 100 RPM/23°C): 350 – 550 cPs | Weight Loss: |
| Thixotropic Index: N/A | @ 200°C: 0.08% |
| *Glass Transition Temp.(Tg): ≥ 90°C (Dynamic Cure 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min) | @ 250°C: 0.25% |
| Coefficient of Thermal Expansion (CTE): | @ 300°C: 1.06% |
| Below Tg: 39 x 10 ⁻⁶ in/in/°C | Operating Temp: |
| Above Tg: 175 x 10 ⁻⁶ in/in/°C | Continuous: - 55°C to 200°C |
| Shore D Hardness: 87 | Intermittent: - 55°C to 300°C |
| Lap Shear Strength @ 23°C: > 2,000 psi | Storage Modulus @ 23°C: 322,012 psi |
| | Particle Size: N/A |
| Optical Properties @ 23°C: | |
| Refractive Index @ 23°C (uncured): 1.5345 @ 589 nm | Spectral Transmission @ 23°C: > 97% @ 700 – 1600 nm |
| | > 88% @ 600 nm |
| | > 51% @ 500 nm |
| Electrical & Thermal Properties: | |
| Thermal Conductivity: N/A | Volume Resistivity @ 23°C: ≥ 2 x 10 ¹³ Ohm-cm |
| Dielectric Constant (1KHz): 3.74 | Dissipation Factor (1KHz): 0.011 |

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