

Number of Components: Single
 Mix Ratio By Weight: N/A
 Specific Gravity: 1.14
 Part A
 Part B
 Pot Life: N/A
 Shelf Life: Six months refrigerated

Minimum Bond Line Cure Schedule*:
 100mW/cm² for >2 minutes @ 320-500 nm (depending on thickness)

Note: Container(s) should be kept closed in a dark location when not in use. *Please see Applications Note(s) available on our website.

Product Description:

EPO-TEK[®] UVO-114 is a single component, UV curable epoxy, designed for adhesive, sealing, coating and encapsulating applications found in semiconductor, electro-optics, fiber optics, medical, and scientific/OEM industries.

EPO-TEK[®] UVO-114 Advantages and Application Notes:

- Being clear and colorless, it is capable of transmitting light in the 400-1600 nm range.
- Compatible with near-IR optics and packaging schemes.
- Can be used as an anti-scratch coating on lenses. Viscosity compatible with spin-coating techniques.
- Suggested Applications:
 - Semiconductor: glass-glass adhesive for CCD/CMOS devices; wafer level adhesive by spin coating.
 - Fiber Optics: adhesive for fibers in v-grooves; adhesive for bonding waveguides; adhesive for refractive index matching.
 - Scientific/OEM:
 - adhesive for prisms, beam splitter cubes, diffraction gratings.
 - capable of optical replication of over 10 million femto-liters per cm². Contact techserv@epotek.com for more information.
- Contact us for application specific alternatives in viscosity, index of refraction (Nd), Tg, and color.

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; * denotes test on lot acceptance basis; Cure condition: varies as required)*

| Physical Properties: | |
|---|--|
| *Color: Clear/Colorless | Die Shear Strength @ 23°C: ≥ 15 Kg / 5,100 psi |
| *Consistency: Pourable liquid | Degradation Temp. (TGA): 361°C |
| *Viscosity (@ 100 RPM/23°C): 350 - 550 cPs | Weight Loss: |
| Thixotropic Index: N/A | @ 200°C: 1.23% |
| *Glass Transition Temp.(Tg): ≥ 45°C (Dynamic Post-Cure Scan 20—200°C; Ramp -10—200°C @ 20°C/Min) | @ 250°C: 2.19% |
| Coefficient of Thermal Expansion (CTE): | @ 300°C: 4.52% |
| Below Tg: 66 x 10 ⁻⁶ in/in/°C | Operating Temp: |
| Above Tg: 163 x 10 ⁻⁶ in/in/°C | Continuous: - 55°C to 150°C |
| Shore D Hardness: 76 | Intermittent: - 55°C to 250°C |
| | Storage Modulus @ 23°C: 226,142 psi |
| | Particle Size: N/A |
| Optical Properties @ 23°C: | |
| Index of Refraction @ 23°C: 1.5191 @ 589 nm | Spectral Transmission @ 23°C: > 97% @ 1550 nm |
| | > 94% @ 500-1400 nm |
| | > 79% @ 400nm |

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Epoxy and Adhesives for Demanding Applications™

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Änderungen vorbehalten / Stand: 07/2009