

Number of Components: Two
Mix Ratio By Weight: 100:25
Specific Gravity:
Part A 1.63
Part B 1.16
Pot Life: 1 Hour

Minimum Bond Line Cure Schedule*:
80°C 1 Hour
23°C 1 Day

Shelf Life: One year at room temperature

*Note: Container(s) should be kept closed when not in use. For filled systems, mix contents of each container (A & B) thoroughly before mixing the two together. *Please see Applications Note available on our website.*

Product Description:

EPO-TEK® T905BN-4 is a two component, room temperature cure, thermally conductive epoxy for general adhesive bonding, sealing, potting and encapsulation applications

EPO-TEK® T905BN-4 Advantages & Application Notes:

- A moderate viscosity resin with flowing properties enables potting of cavities, packages and housings.
- Contains a coarse grade of filler, which needs to be taken into account in all bonding, sealing and potting applications. Contact techserv@epotek.com to review your choice.
- Pure white color after cure allows for easy inspection by operators on common electronic packaging surfaces.
- Versatility in cure: 23°C and 100°C ambient, box oven or tunnel oven processes.
- Suggested Applications:
 - Hybrids: thermally conductive adhesive bonding ceramics and metals
 - Electronics:
 - General PCB level potting and adhesive applications. Bonding metal and composite heat sinks to PCBs or SMDs.
 - Transformers: potting of Cu coils, magnets, inductors and other SMDs into their respective casing.
 - Medical Devices
 - Heat sinking of x-ray and ultrasound circuits via adhesive and potting processes.

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: 80°C/1 Hour; * denotes test on lot acceptance basis)*

Physical Properties:	
*Color: Part A: White Part B: Light Mauve	Die Shear Strength @ 23°C: ≥ 5 Kg / 1,700 psi
*Consistency: Granular paste	Degradation Temp. (TGA): 350°C
*Viscosity (@ 20 RPM/23°C): 12,000 – 18,000 cPs	Weight Loss:
Thixotropic Index: 2.58	@ 200°C: 0.18%
*Glass Transition Temp.(Tg): ≥ 50°C (Dynamic Cure	@ 250°C: 0.64%
20—200°C /ISO 25 Min; Ramp -40—200°C @ 20°C/Min)	@ 300°C: 1.44%
Coefficient of Thermal Expansion (CTE):	Operating Temp:
Below Tg: 24 x 10 ⁻⁶ in/in/°C	Continuous: - 55°C to 200°C
Above Tg: 120 x 10 ⁻⁶ in/in/°C	Intermittent: - 55°C to 300°C
Shore D Hardness: 79	Storage Modulus @ 23°C: 1,152,068 psi
Lap Shear Strength @ 23°C: 1,412psi	*Particle Size: ≤ 300 Microns
Thermal Properties:	
Thermal Conductivity: 1.78 W/mK	
Electrical Properties:	
Dielectric Constant (1KHz): 3.82	Volume Resistivity @ 23°C: ≥ 4 x 10 ¹⁴ Ohm-cm
Dissipation Factor (1KHz): 0.012	

EPOXY TECHNOLOGY, INC.

14 Fortune Drive, Billerica, MA 01821-3972 Phone: 978.667.3805 Fax: 978.663.9782
www.EPOTEK.com

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