

## **EPO-TEK® 730 Technical Data Sheet**

For Reference Only

General Purpose Epoxy

Number of Components: Two Minimum Bond Line Cure Schedule\*:

Mix Ratio By Weight: 1:1 100°C 30 Minutes

80°C Specific Gravity: 2 Hours

23°C Part A 1:12 24 Hours Part B 0.94

Shelf Life: One year at room temperature

1 Hour

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.

Pot Life:

Product Description:

EPO-TEK® 730 is a two component, thixotropic, room temperature-curing epoxy adhesive.

## EPO-TEK® 730 Advantages & Application Notes:

- Excellent "all purpose adhesive". Many uses in job shop and repair businesses, home or household, outdoor, recreation, camping, automotive, boating; and industrial use such as filtration and metal working.
- Designed for those applications where a limited amount of flow is desirable. Capillary forces do not pull the epoxy out of alignment.
- The paste-like appearance allows it to be spread by hand using a spatula or blade, by dispensing equipment, or specialty packaging.
- The 1:1 mix ratio allows it to be easily mixed by volume or by weight.
- Used in the fabrication of X-ray sensors. Adheres to metal foils and substrates, especially lead.
- Available in black and in different viscosities. Contact techserv@epotek.com for your best recommendation.
- Excellent adhesion to foam/plastics; especially those used in filtration applications.
- Medical grade suggested applications:
  - Has passed the requirements of USP Class VI Biocompatibility Standards for implantation devices.
  - Excellent adhesion to stainless steel. Suitable for adhesive and sealing.
- Suggested for LCD plug-seal or end-seal, due to its high viscosity nature and room temperature cure.
- Can be used for joining SMDs to PCB, for staking applications, or double sided PCB. It has wet, "green strength" before cure. In many cases, the thixotropic nature of the adhesive will hold parts in place without special fixtures while the hardening process is taking place.
- Very popular epoxy for wood-working applications.
- Versatility in curing options between 23°C and 100°C.

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/2 hours; \* denotes test on lot acceptance basis)

**Physical Properties:** 

\*Color: Part A: Tan Part B: Tan Die Shear Strength @ 23°C: ≥ 10 Kg / 3,400 psi

\*Consistency: Smooth Paste Degradation Temp. (TGA): 364°C

\*Viscosity (@ 2.5 RPM/23°C): 80,000 - 120,000 cPs Weight Loss:

Thixotropic Index: 2.1 @ 200°C: 1.41% \*Glass Transition Temp.(Tg): ≥ 55°C (Dynamic Cure @ 250°C: 2.22%

20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min) @ 300°C: 4.16%

**Coefficient of Thermal Expansion (CTE): Operating Temp:** 

**Below Tq:** 66 x 10<sup>-6</sup> in/in/°C Continuous: - 55°C to 150°C **Above Tg:** 248 x 10<sup>-6</sup> in/in/°C Intermittent: - 55°C to 250°C Shore D Hardness: 64 Storage Modulus @ 23°C: 123,527 psi

Lap Shear Strength @ 23°C: > 2000 psi \*Particle Size: ≤ 20 Microns

Thermal Properties:

Thermal Conductivity: N/A

**Electrical Properties:** 

Volume Resistivity @ 23°C: ≥ 3 x 10<sup>13</sup> Ohm-cm Dielectric Constant (1KHz): 3.17

Dissipation Factor (1KHz): 0.021

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