

EPO-TEK[®] HYB-353ND-LV (formerly 113-91-5)

Date: 11/5/2015

Rev: IV

Material Description:

A two component, high temperature hybrid epoxy for semiconductor, fiber optic and medical applications. It is designed to have similar cured performance to EPO-TEK[®] 353ND; modified to allow for initial UV tacking. It is a lower viscosity version of EPO-TEK[®] HYB-353ND.

Number of Components: Two

Mix Ratio by Weight: 100 : 5

Recommended Cure: Initial Tack 100mW/cm² for 10 seconds @ 240-365 nm + 150°C/30 Minutes Thermal Cure

Minimum Alternative Cure: Initial Tack 100mW/cm² for 10 seconds @ 240-365 nm + 100°C/30 Minutes Thermal Cure

Initial Tack 100mW/cm² for 10 seconds @ 240-365 nm + 80°C/1 Hour Thermal Cure

Specific Gravity: Part A: 1.14 Part B: 1.02

Pot Life: 20 Hours

Shelf Life: Six months at room temperature, protected from light

NOTES:

- Container(s) should be kept closed when not in use.
- To prevent gelation, keep containers away from light sources.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity & others) may vary from those stated below when syringe packaging and/or post-processing is required.
- If product crystallizes in storage, place container in warm oven until crystallization disappears. Refer to Tech Tip #7 on website.
- **TOTAL MASS SHOULD NOT EXCEED 25 GRAMS**

MATERIAL CHARACTERISTICS: Cure Condition: Initial Tack 100mW/cm² for 10 seconds @ 240-365nm + 150°C/30 Minutes Thermal Cure
To be used as a guide only, not as a specification. Different batches, conditions and applications yield differing results.

PHYSICAL PROPERTIES:

Color (before cure):	Part A: Clear	Part B: Amber
Consistency:	Pourable liquid	
Viscosity (23°C) @ 100 rpm:	1,172 cPs	
Thixotropic Index:	N/A	
Glass Transition Temp:	90 °C (Dynamic Cure:20-200°C/ISO 25 Min; + Ramp -10-200°C @ 20°C/Min)	
Shore D Hardness:	83	
Die Shear @ 23°C:	19 Kg	
Degradation Temp:	400 °C	
Weight Loss:	@ 200°C	0.08 %
	@ 250°C	0.58 %
	@ 300°C	1.61 %
Suggested Operating Temperature:	<350 °C (Intermittent)	

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	≥ 50% @ 550 nm
	≥ 95% @ 1,100-1,600 nm
	≥ 98% @ 800-1,000 nm
Index of Refraction:	1.5521 @ 589 nm (uncured)

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