

Date: Aug 2014
Rev: IX
No. of Components: Two
Mix Ratio by Weight: 20 : 1
Specific Gravity: Part A: 1.20 Part B: 1.02
Pot Life: 4 Hours
Shelf Life: One year at room temperature

Recommended Cure: 150°C / 1 Hour

Minimum Alternative Cure(s):
may not achieve performance properties below
 150°C / 5 Minutes
 120°C / 15 Minutes
 100°C / 30 Minutes

NOTE: Container(s) should be kept closed when not in use. Filled systems should be stirred thoroughly before mixing and prior to use.

Product Description: EPO-TEK[®] OD2002 is a two component, thermally and electrically insulating, optical epoxy. Designed as a highTg yet still compliant alternative to EPO-TEK[®] 353ND.

Typical Properties:

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

PHYSICAL PROPERTIES:

* Color (before cure):	Part A: Cloudy Part B: Amber
* Consistency	Viscous liquid
* Viscosity (23°C): @ 5 rpm	24,000-42,000 cPs
Thixotropic Index:	N/A
* Glass Transition Temp:	≥ 140 °C (Dynamic Cure:20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min)
Coefficient of Thermal Expansion (CTE):	
Below Tg:	45 x 10 ⁻⁶ in/in°C
Above Tg:	187 x 10 ⁻⁶ in/in°C
Shore D Hardness:	69
Lap Shear @ 23°C:	1,570 psi
Die Shear @ 23°C:	≥ 10 Kg 3,400 psi
Degradation Temp:	443 °C
Weight Loss:	
@ 200°C	< 0.05 %
@ 250°C	< 0.05 %
@ 300°C	< 0.05 %
OperatingTemp:	
: Continuous:	- 55°C to 225°C
Intermittent:	- 55°C to 325°C
Storage Modulus:	263,291 psi
* Particle Size:	N/A

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	N/A
* Volume Resistivity @ 23°C:	≥ 2 x 10 ¹² Ohm-cm
Dielectric Constant (1KHz):	2.83
Dissipation Factor (1KHz):	0.011

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	≥ 98% @ 800 -1640 nm
Refractive Index (uncured):	1.5728 @ 589 nm
Refractive Index (cured):	@ 589 nm

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