

Product Information Sheet

MATERIAL ID:

EPO-TEK® 730 Unfilled Black

Date: 02/2007

Per:

Rev: 1

Material Description:

A two component, room temperature curing, general and structural grade epoxy. It can be used for adhesive, sealing, and encapsulating applications in medical, x-ray device, filtration, opto-electronics, and PCB industries. It is a black version of EPO-TEK® 730 Unfilled.

Number of Components:

Two

Mix Ratio by weight:

1:1

Cure Schedule (minimum)

100°C/30 Minutes - 80°C/2 Hours - 23°C/24 Hours

Specific Gravity:

--- Part A: 1.17 Part B: 0.97

Pot Life:

1 Hour

Shelf Life:

One year at room temperature

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

MATERIAL CHARACTERISTICS: *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: varies as required*
 * denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

*Color (before cure):	Part A: Black Part B: Clear Yellow	Die Shear @ 23°C:	≥ 10 Kg / 3,400 psi
*Consistency:	Pourable liquid	Degradation Temp:	343 °C
*Viscosity (23°C):		Weight Loss:	
@ 20 rpm	10,000 - 14,000 cPs	@ 200°C:	1.01 %
Thixotropic Index:	N/A	@ 250°C:	
*Glass Transition Temp:	≥ 50 °C (Dynamic Cure	@ 300°C:	
20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)		Operating Temp:	
Coefficient of Thermal Expansion (CTE):		Continuous:	- 55°C to + 150°C
Below Tg:	61 x 10 ⁻⁶ in/in°C	Intermittent:	- 55°C to + 250°C
Above Tg:	192 x 10 ⁻⁶ in/in°C	Storage Modulus @ 23°C:	129,916 psi
Shore D Hardness:	76	*Particle Size:	N/A
Lap Shear @ 23°C:	> 2,000 psi		

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	N/A	Dielectric Constant (1KHz):	3.24
Volume Resistivity @ 23°C:	≥ 4 x 10 ¹³ Ohm-cm	Dissipation Factor (1KHz):	0.009

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	< 2 % @ 300-960 nm	Index of Refraction:	N/A
	< 5 % @ 980-1260 nm		

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