

Product Information Sheet

MATERIAL ID:

EPO-TEK® 730 Black

Date: 02/2007

Per:

Rev: 1

Material Description:

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

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: 1.12 Part B: 0.94

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: 80°C/2 hours*

* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

*Color (before cure):	Part A: Black Part B: Tan	Die Shear @ 23°C:	≥ 10 Kg / 3,400 psi
*Consistency:	Smooth paste	Degradation Temp:	364 °C
*Viscosity (23°C):		Weight Loss:	
@ 2.5 rpm	80,000 - 120,000 cPs	@ 200°C:	1.41 %
Thixotropic Index:	2.1	@ 250°C:	2.22 %
*Glass Transition Temp:	≥ 55 °C (Dynamic Cure 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 Tg:	82 x 10 ⁻⁶ in/in°C	Continuous:	- 55°C to + 150°C
Above Tg:	245 x 10 ⁻⁶ in/in°C	Intermittent:	- 55°C to + 250°C
Shore D Hardness:	64	Storage Modulus @ 23°C:	110,458 psi
Lap Shear @ 23°C:	> 2,000 psi	*Particle Size:	≤ 20 microns

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	N/A	Dielectric Constant (1KHz):	3.50
*Volume Resistivity @ 23°C:	≥ 1 x 10 ¹³ Ohm-cm	Dissipation Factor (1KHz):	0.024

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	< 10 % @ 480 nm < 25 % @ 980 nm < 45 % @ 1550 nm	Index of Refraction:	N/A
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EPOXY TECHNOLOGY, INC.
14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782
WEB SITE: www.epotek.com