

EPO-TEK® Thermally Conductive/Electrically Insulating Selector Guide

EPO-TEK®	NO. OF COMPONENTS	CURE TEMPERATURE (minimal)	VISCOSITY @ 23°C (cPs)	GLASS TRANSITION TEMPERATURE (Tg)	DIE SHEAR STRENGTH @ RT (80 mil X 80 mil)	THERMAL CONDUCTIVITY (W/m ² K)	MAX. OPER. TEMPERATURE CONTINUOUS	TGA DEGRADATION TEMPERATURE	CTE Below Tg/ Above Tg (in/in/°C)	POT LIFE (@ room temp.)	SHELF LIFE (@ room temp. or *@-40°)
920FL	Two	150°C – 5 mins. 100°C – 20 mins.	@ 20 rpm 8,000 – 12,000	≥90°C	≥20kg / 6,800psi	0.89	200°C	362°C	21 x 10 ⁻⁶ / 97 x 10 ⁻⁶	8 hours	1 year
930-4	Two	150°C – 10 mins. 80°C – 6 hours	@ 20 rpm 10,500 – 15,500	≥90°C	≥15kg / 5,100psi	1.67	200°C	425°C	27 x 10 ⁻⁶ / 136 x 10 ⁻⁶	1 day	1 year
H65-175MP	Single	180°C – 1 hour	@ 2.5 rpm 80,000 – 120,000	≥100°C	≥20kg / 6,800psi	0.80	200°C	397°C	38 x 10 ⁻⁶ / 136 x 10 ⁻⁶	28 days	1 year*
H67-MP	Single	150°C – 1 hour	@ 1 rpm 300,000 – 400,000	≥90°C	≥10kg / 3,400psi	0.45	200°	350°C	16 x 10 ⁻⁶ / 68 x 10 ⁻⁶	28 days	1 year*
H70E	Two	175°C – 1 mins. 80°C – 90 mins.	@ 50 rpm 4,000 – 7,000	≥80°C	≥10kg / 3,400psi	0.90	200°C	451°C	15 x 10 ⁻⁶ / 64 x 10 ⁻⁶	56 hours	1 year
H70E-2	Two	175°C – 1 mins. 80°C – 90 mins.	@ 20 rpm 9,000 – 15,000	≥80°C	≥5kg / 1,700psi	1.00	200°C	447°C	20 x 10 ⁻⁶ / 112 x 10 ⁻⁶	2 days	1 year
H70E-4	Two	120°C – 15 mins. 50°C – 12 hours	@ 10 rpm 20,000 – 40,000	≥80°C	≥5kg / 1,700psi	0.57	200°C	432°C	17 x 10 ⁻⁶ / 77 x 10 ⁻⁶	2.5 days	1 year
H70S	Two	175°C – 1 min. 80°C – 90 mins.	@ 100 rpm 1,300 – 1,800	≥50°C	≥10kg/ 3,400psi	0.44	200°C	400°C	40 x 10 ⁻⁶ / 190 x 10 ⁻⁶	3 days	1 year
H74	Two	150°C – 5 mins. 100°C – 20 mins.	@ 5 rpm 45,000 – 65,000	≥100°C	≥15kg/ 5,100psi	1.25	250°C	425°C	21 x 10 ⁻⁶ / 95 x 10 ⁻⁶	2 hours	1 year
H77	Two	150°C – 1 hour	@ 20 rpm 6,000 – 12,000	≥80°C	≥5kg / 1,700psi	0.66	250°C	405°C	33 x 10 ⁻⁶ / 130 x 10 ⁻⁶	6 hours	1 year
T6116-R2	Single	200°C – 5 mins. 150°C – 1 hour	@ 10 rpm 11,000 – 18,000	≥45°C	≥15kg / 5,100psi	0.35	250°C	451°C	20 x 10 ⁻⁶ / 184 x 10 ⁻⁶	7 days	1 year*
T6117	Single	180°C – 15 mins. 150°C – 30 mins.	@ 20 rpm 14,000 – 20,000	≥45°C	≥10kg/ 3,400psi	0.50	200°C	378°C	47 x 10 ⁻⁶ / 112 x 10 ⁻⁶	4 days	1 year*
T7109	Two	150°C – 10 mins. 80°C – 8 hours	@ 20 rpm 14,000 – 20,000	≥45°C	≥15kg / 5,100psi	0.70	200°C	377°C	46 x 10 ⁻⁶ / 239 x 10 ⁻⁶	4 hours	1 year
T7110	Two	80°C – 2 hours RT – 3-4 days	@ 100 rpm 1,400 – 2,200	≥40°C	≥10kg/ 3,400psi	1.00	150°C	314°C	31 x 10 ⁻⁶ / 142 x 10 ⁻⁶	3.5 hours	1 year
T905-BN3	Two	100°C – 1 hour RT – 2 days	@ 10 rpm 6,553	≥40°C	≥10kg / 3,400psi	3.42	250°C	402°C	49 x 10 ⁻⁶ / 268 x 10 ⁻⁶	3-4 hours	1 year
TM112	Single	200°C – 1 hour	@ 20 rpm 13,000 – 19,000	≥90°C	≥20kg / 6,800psi	0.48	250°C	435°C	52 x 10 ⁻⁶ / 127 x 10 ⁻⁶	1 day	1 year*
TZ101	Single	150°C – 1 hour	@ 5 rpm 38,000	≥61°C	≥20kg / 6,800psi	0.82	175°C	355°C	25 x 10 ⁻⁶ / 126 x 10 ⁻⁶	1 month	6 months*

Above is representative of Epoxy Technology's diverse selection of thermally conductive/electrically insulating adhesives. **Please see other side for application notes.**

Rev. 3/07



14 Fortune Drive, Billerica, MA 01821-3972 USA PHONE: 978.667.3805 FAX: 978.663.9782 www.EPOTEK.com

EPO-TEK® APPLICATIONS	920-FL	930-4	H65-175MP	H67-MP	H70E	H70E-2	H70E-4	H70S	H74	H77	T6116-R2	T6117	T7109	T7110	T905-BN3	TM112	TZ101
SUBSTRATE ATTACH	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X
LID ATTACH			X	X					X	X							
HEAT SINKING ADHESIVE	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X
DIE ATTACH HYBRID/MCM		X	X	X	X			X			X	X	X			X	X
CHIP ENCAPSULANT	X					X		X						X			X
MIL STD 883/5011 COMPLIANT			X	X													
DIE ATTACH SEMICONDUCTOR		X	X	X	X			X			X	X	X			X	X
AEROSPACE ENVIRONMENTS/ NASA APPROVED	X	X	X	X	X				X	X			X				
HIGH TEMP. APPLICATIONS	X	X	X	X					X	X	X	X	X			X	
CRYOGENIC APPLICATIONS					X								X	X			X
SMD ATTACH			X	X	X	X	X		X		X	X	X			X	X
POTTING AND CAVITY FILLING	X							X		X				X	X		X

DISCLAIMER: Data presented is provided only as a guide in selecting an adhesive. Properties listed are typical, average values, based on tests believed to be accurate. It is recommended the user perform a thorough evaluation for any application based on their specific requirements. Epoxy Technology makes no warranties (expressed or implied) and assumes no responsibility in connection with the use or inability to use these products.



14 Fortune Drive, Billerica, MA 01821-3972 USA PHONE: 978.667.3805 FAX: 978.663.9782 www.EPOTEK.com