epoxySet inc.

ISO-9001-2008 Certified

Die Attach Adhesives
For Consumer & Industrial Electronics

Product Selection Guide

EPOXYSET - Electrically & Thermally conductive adhesives are typically used for die-attach, chip bonding, cold -soldering, and other microelectronic applications. All products feature very high purity, low ionic content, wide operating temperature range and excellent electrical conductivity even after exposure for 1000 hours at 150°C.

ELECTRICALLY CONDUCTIVE

Product	Features	Viscosity (CP-51spindle) cps	Cure Schedule	Die Shear Strength psi	Tg (°C)	CTE (10^{-6}/°C) Below Tg	Volume Resistivity Ohm-cm	Thermal Conductivity W/m°K	Max. Service Temp	Pot Life	Shelf Life
EO-21	Easy to dispense, minimal tailing Die attach applications	32,400 @ 5 rpm	1 hr @ 100°C	2100	68	62	0.0004	2.0	125°C	1 hr @ 25°C	1 year @ 25°C
EO-24	Low viscosity, fast cure Die, LED and substrate attach	2800 @ 100 rpm	5 minutes @ 150°C	>1600	80	56	0.0005	1.8	200°C	>2 days @ 25°C	1 year @ 25°C
EO-32	Semiconductor grade die attach epoxy. Ideal for auto dispensing, stamping and screening. Excellent adhesion to copper, silver and gold.	45,000 @ 5 rpm	5 minutes @ 150°C	>2000	117	42	<0.0003	4.2	200°C	>24 hrs @ 25°C	1 year @ 25°C
EO-81	Low viscosity, RT storable Die attach adhesive	12,000 @ 5 rpm	1 hr @ 180°C	>2500	82	54	0.0003	1.7	200°C	>20 days @ 25°C	1 month @ 25°C
EO-83M-2	Low viscosity, fast cure Die, LED and substrate attach	12,700 @ 5 rpm	30 minutes @ 150°C	>1600	126	66	<0.0004	2.0	200°C	>20 days @ 25°C	3 months @ 0°C
EO-84M-1T	Screen printable – Die attach, hybrid chip adhesive	49,000 @ 5 rpm	1 hr @ 150°C	>1600	106	54	<0.0003	2.0	200°C	>20 days @ 25°C	3 months @ 0°C
EO-97M2	Easy to dispense, minimal tailing Die attach applications	47,000 @ 5 rpm	5 min @ 150°C	>2000	82	56	0.0004	1.8	200°C	>7 days @ 25°C	4 months @ 0°C
EO-98HT	Fast cure, Low viscosity Die, LED and substrate attach	37,500 @ 5 rpm	10-15 minutes @ 150°C	>1200	136	42	<0.0005	1.8	250°C	>8 hrs @ 25°C	1 year @ -40°C

THERMALLY CONDUCTIVE

Product	Features	Viscosity (CP-51spindle) cps	Cure Schedule	Die Shear Strength psi	Tg (°C)	CTE (10^{-6}/°C) Below Tg	Volume Resistivity Ohm-cm	Thermal Conductivity W/m°K	Max. Service Temp	Pot Life	Shelf Life
EB-316BN-2	1:1 ratio, Low viscosity, fast cure Die, LED and substrate attach	Paste	2 hrs 80°C	>3000	85	77	$> 10^{15}$	1.0	125°C	45 mins @ 25°C	1 year @ 25°C
EB-316-TC	1:1 ratio, Low viscosity, fast cure Die, LED and substrate attach	Paste	2 hrs 80°C	>3000	85	77	$> 10^{14}$	1.0	125°C	45 mins @ 25°C	1 year @ 25°C
EB-402-1	Fast cure, smooth paste Die, LED and substrate attach	>250,000	1-2 hrs 125°C	>3000	145	33	$> 10^{15}$	1.8	200°C	10 mins @ 125°C	1 year @ -40°C
EB-403-1LV	Fast cure, smooth paste Die, LED and substrate attach	140,000 – 160,000	30 min 150°C	>3500	125	31	$> 10^{15}$	1.9	200°C	30 mins @ 80°C	3 months @ 25°C
EB-403-1AN	Fast cure, smooth paste Die, LED and substrate attach	>250,000	30 min 150°C	>3000	132	32	$> 10^{15}$	3.6	200°C	30 mins @ 80°C	3 months @ 25°C
EB-404-1	Low viscosity, fast cure Die, LED and substrate attach	40,000	30 min 150°C	>2800	130	51	$> 10^{15}$	1.2	200°C	10 mins @ 80°C	3 months @ 25°C
EB-425	Two parts, long work life Easy to dispense, minimal tailing Die attach applications	130,000 – 180,000	1-2 hrs 150°C	>3400	165	39	$> 10^{15}$	1.7	200°C	>4 hrs @ 25°C	1 year @ 25°C

DISCLAIMER: All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.