



ISO 9001-2008 Certified

## Selector Guide

# ELECTRICALLY CONDUCTIVE

Epoxyset offers a full range of electrically conductive epoxy adhesives for the semiconductor, optoelectronic, automotive, aerospace and electronic assembly industries. Our wide range product line allows engineers to select material with the best combinations of physical, electrical and thermal characteristics. Our products provide low volume resistivity, very good electrical stability, low out-gassing, long pot life and fast cure.

Product	Viscosity @ 25C cp	Pot Life	Cure Schedule	Alternate Cure	Die Shear Strength psi	Thermal Conductivity W/m <sup>2</sup> K	Glass Transition Temp	CTE (Below Tg) ppm/°C	Volume Resistivity Ohm-cm	Max Service Temp	Shelf life
<b>ONE COMPONENT</b>											
EO-81	10,000 – 12,000	>30 days @ 25°C	1 hr @150°C	½ hr @180°C	>3000	1.8	>90°C	54	<0.0004	250°C	3 months @ below 10°C
EO-83M-1	40,000 – 50,000	>2 weeks @ 25°C	½ hr @150°C	5 min @ 180°C	>3400	1.8	128°C	32	<0.0004	200°C	3 months @ below 10°C
EO-83M-2	12,000 – 15,000	>2 weeks @ 25°C	½ hr @150°C	5 min @ 180°C	>3400	1.8	100°C	38	<0.0004	250°C	3 months @ below 10°C
EO-84M-1T	45,000-55,000	>20 days @25°C	1 hr @150°C	½ hr @175°C	>1600	2.0	106°C	54	<0.0003	250°C	3 months @ below 10°C
EO-91	2100	2 hrs @ 25°C	24 hrs @ 25°C	2-4 hrs @ 80°C	>1700	1.3	59°C	42	<0.0005	150°C	1 Year @ -40°C
EO-93	30,000-40,000	> 1 day @ 25°C	½ hr @150°C	5-10 min @ 160°C	>2500	2.0	82°C	48	0.0002	200°C	1 Year @ -40°C
EO-97M-2	40,000-50,000	1 month @ 25°C	1 hr @ 150°C	2-3 hrs @ 125°C	>2000	1.6	128°C	42	<0.0006	200°C	3 months @ below 10°C
<b>TWO COMPONENTS</b>											
EO-21	30,000 – 35,000	1-2 hrs @ 25°C	24 hrs @ 25°C	2 hrs @ 65°C	2800	2.2	68°C	49	0.0004	150°C	1 year @ 25°C
EO-21M-5	1000 – 1400	4 hrs @ 25°C	48 hrs @ 25°C	2-4 hrs @ 80°C	1700	1.4	55°C	45	0.0005	150°C	1 year @ 25°C
EO-23M	4000 - 5000	1-2 hrs @ 25°C	24 hrs @ 25°C	2 hrs @ 65°C	2600	2.2	62°C	49	0.0004	150°C	1 year @ 25°C
EO-24	2500 – 3500	>2 days @ 25°C	1 hr @ 125°C	5-10 min @ 150°C	1700	2.9	88°C	30	0.0004	200°C	1 year @ 25°C
EO-30M-1	Paste	3-4 hrs @ 25°C	24 hrs @ 25°C	2 hrs @ 65°C	2200	1.3	50°C	77	0.001	120°C	1 year @ 25°C
EO-30M-6	8000-12,000	>4 hrs @ 25°C	20-30 min @ 100°C	24 hrs @ 25°C	1800	1.4	45°C	75	0.0004	150°C	1 year @ 25°C
EO-32	42,000	2 days @ 25°C	30-40 min @ 125°C	15-20 min @ 150°C	>1600	1.7	117°C	42	<0.0004	200°C	1 year @ 25°C
EO-38M-3	30,000 – 35,000	>24 hrs @ 25°C	1 hr @ 150°C	2-3 hrs @ 125°C	>1600	2.0	95°C	56	<0.0004	200°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.



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## Recommended Application Table ELECTRICALLY CONDUCTIVE

PRODUCT	EO-81	EO-83M-1	EO-83M-2	EO-84M-1T	EO-91	EO-93	EO-97M-2	EO-21	EO-21M-5	EO-24	EO-23M	EO-30M-1	EO-30M-6	EO-32	EO-38M-3
MCM/Hybrid Die Attach	●			●			●			●				●	
Semiconductor Die Attach	●	●	●	●	●	●	●	●		●				●	●
Microwave	●	●	●	●			●	●	●	●	●	●	●	●	●
Quartz/Crystal Attach										●					
Polymer Flip Chip										●				●	
Solder Replacement										●		●	●	●	
High Temperature	●						●							●	●
LED Attach	●	●	●	●			●			●				●	
LCD Interconnect								●	●	●	●	●	●	●	
Substrate Attach	●			●			●	●	●	●	●	●	●		
Low Stress								●	●		●	●	●	●	
Medical										●					
Photonic Devices	●	●	●	●	●	●	●	●	●	●	●	●	●		●

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