

## Master Bond EP40 High Shear and Peel Strength, Two Component, Flexible Epoxy

Category : Polymer , Thermoset , Epoxy , Epoxy Encapsulant, Unreinforced , Epoxy, Cast, Unreinforced

### Material Notes:

Master Bond Polymer System EP40 is newly developed two component highly flexible epoxy compound for high performance bonding, potting, encapsulation, and sealing with outstanding shear and peel strength. It features excellent adhesion to engineering plastics as well as metals and various other substrates. EP40 forms high performance flexible bonds, seals and castings that offer excellent retention of physical, electrical and chemical properties even after prolonged exposure to unfavorable environmental conditions.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Master-Bond-EP40-High-Shear-and-Peel-Strength-Two-Component-Flexible-Epoxy.php](http://www.lookpolymers.com/polymer_Master-Bond-EP40-High-Shear-and-Peel-Strength-Two-Component-Flexible-Epoxy.php)

Physical Properties	Metric	English	Comments
Viscosity	6000 - 6500 cP	6000 - 6500 cP	mixed

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	50 - 55	50 - 55	
Tensile Strength	8.27 - 10.3 MPa	1200 - 1500 psi	
Elongation at Break	110 %	110 %	
Tensile Modulus	0.827 GPa	120 ksi	
Shear Strength	7.58 MPa	1100 psi	Tensile lap, Polycarbonate/Polycarbonate
	14.2 MPa	2060 psi	lap, steel/steel
Peel Strength	>= 3.51 kN/m	>= 20.0 pli	polycarbonate/polycarbonate
	>= 7.89 kN/m	>= 45.0 pli	steel/steel

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	113 °C	235 °F	
Minimum Service Temperature, Air	-73.3 °C	-100 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+8 ohm-cm	>= 1.00e+8 ohm-cm	
	@Temperature 100 °C	@Temperature 212 °F	
	>= 1.00e+12 ohm-cm	>= 1.00e+12 ohm-cm	
	@Temperature 25.0 °C	@Temperature 77.0 °F	

Electrical Properties	Metric	English	Comments
Dielectric Constant	@Frequency 60.0 Hz, Temperature 25.0 °C	@Frequency 60.0 Hz, Temperature 77.0 °F	
	4.12	4.12	
Dielectric Strength	@Frequency 1000 Hz, Temperature 100 °C	@Frequency 1000 Hz, Temperature 212 °F	
	21.7 kV/mm	550 kV/in	
Dissipation Factor	@Thickness 2.03 mm	@Thickness 0.0800 in	
	0.0070	0.0070	
Dissipation Factor	@Frequency 100000 Hz, Temperature 25.0 °C	@Frequency 100000 Hz, Temperature 77.0 °F	

Processing Properties	Metric	English	Comments
Cure Time	1080 - 1440 min	18.0 - 24.0 hour	ambient temperatures
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Pot Life	1800 - 3600 min	30.0 - 60.0 hour	100 gram mass
	@Temperature 121 °C	@Temperature 250 °F	
Shelf Life	100 - 120 min	100 - 120 min	in unopened containers
	12.0 Month	12.0 Month	

Descriptive Properties	Value	Comments
Mixing Ratio (A to B)	1/1	

## Contact Songhan Plastic Technology Co.,Ltd.

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