

## Resinlab® EP1320 Heat Cure Epoxy Conformal Coating

Category : Polymer , Adhesive , Thermoset , Epoxy , Epoxy Adhesive

### Material Notes:

Resinlab™ EP1320 and EP1320LV are one part heat cure epoxy conformal coatings. They can also be used as a small mass potting compounds, structural adhesives, or insulating polymer systems where the application requires low shrinkage and excellent adhesion to a wide variety of plastics, metals and circuit board materials. These products give very good environmental protection and dielectric properties over a wide temperature range. The primary difference between the two versions is the LV version has a lower high shear viscosity (higher press flow rate) to provide easier dispensing. The amount of sag upon curing is the same. Information Provided by Resinlab L.L.C., an Ellsworth Adhesives Company.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Resinlab-EP1320-Heat-Cure-Epoxy-Conformal-Coating.php](http://www.lookpolymers.com/polymer_Resinlab-EP1320-Heat-Cure-Epoxy-Conformal-Coating.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.30 g/cc	1.30 g/cc	TM R050-16
Water Absorption	0.13 % @Time 86400 sec	0.13 % @Time 24.0 hour	TM R050-35
Viscosity	100000 cP	100000 cP	RVT, #6, 2.5 rpm; TM R050-12

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	85	85	TM R050-17
Tensile Strength at Break	34.5 MPa	5000 psi	TM R050-36
Tensile Strength, Ultimate	34.5 MPa	5000 psi	TM R050-36
Tensile Strength, Yield	20.7 MPa	3000 psi	TM R050-36
Elongation at Break	0.00 - 1.0 %	0.00 - 1.0 %	TM R050-36
Tensile Modulus	4.83 GPa	700 ksi	TM R050-36
Compressive Yield Strength	82.7 MPa	12000 psi	TM R050-38
Compressive Strength	124 MPa	18000 psi	Break; TM R050-38
	138 MPa	20000 psi	Ultimate; TM R050-38
Compressive Modulus	3.79 GPa	550 ksi	TM R050-38
Adhesive Bond Strength	8.96 MPa	1300 psi	Lap shear; 2024 T3 Al Abraded / MEK Wipe; TM R050-37

Thermal Properties	Metric	English	Comments
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CTE linear Thermal Properties	48.0 $\mu\text{m}/\text{m}\cdot\text{°C}$ Metric	26.7 $\mu\text{in}/\text{in}\cdot\text{°F}$ English	Comments
Thermal Conductivity	0.360 W/m-K	2.50 BTU-in/hr-ft <sup>2</sup> -°F	
Maximum Service Temperature, Air	150 °C	302 °F	
Minimum Service Temperature, Air	-40.0 °C	-40.0 °F	
Glass Transition Temp, Tg	105 °C	221 °F	TM R050-25

Electrical Properties	Metric	English	Comments
Volume Resistivity	8.00e+14 ohm-cm	8.00e+14 ohm-cm	
Dielectric Constant	3.5	3.5	
	@Frequency 100 Hz, Temperature 25.0 °C	@Frequency 100 Hz, Temperature 77.0 °F	
Dielectric Strength	17.3 kV/mm	440 kV/in	

Processing Properties	Metric	English	Comments
Cure Time	5.00 - 10.0 min	0.0833 - 0.167 hour	
	@Temperature 150 °C	@Temperature 302 °F	
	15.0 min	0.250 hour	
	@Temperature 120 °C	@Temperature 248 °F	
	30.0 min	0.500 hour	
	@Temperature 110 °C	@Temperature 230 °F	

Descriptive Properties	Value	Comments
Color	Black	

## Contact Songhan Plastic Technology Co.,Ltd.

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