

## Resinlab® EP1320LV 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-EP1320LV-Heat-Cure-Epoxy-Conformal-Coating.php](http://www.lookpolymers.com/polymer_Resinlab-EP1320LV-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	40000 cP	40000 cP	RVT, #5, 2.5 rpm; TM R050-12

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	85	85	TM R050-17
Tensile Strength at Break	10.3 MPa	1500 psi	TM R050-36
Tensile Strength, Ultimate	10.3 MPa	1500 psi	TM R050-36
Tensile Strength, Yield	2.76 MPa	400 psi	TM R050-36
Elongation at Break	10 - 15 %	10 - 15 %	TM R050-36
Tensile Modulus	0.345 - 0.483 GPa	50.0 - 70.0 ksi	TM R050-36
Compressive Yield Strength	89.6 MPa	13000 psi	TM R050-38
Compressive Strength	110 MPa	16000 psi	Break; TM R050-38
	124 MPa	18000 psi	Ultimate; TM R050-38
Compressive Modulus	4.14 GPa	600 ksi	TM R050-38
Adhesive Bond Strength	15.9 MPa	2300 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	Metric 48.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	English 26.7 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	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	98.0 °C	208 °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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