

## Resinlab® EP965LVLX Black Unfilled Electronic Grade Epoxy Encapsulant

Category : Polymer , Thermoset , Epoxy , Epoxy Cure Resin , Epoxy Encapsulant, Unreinforced

### Material Notes:

Resinlab™ EP965LVLX Black is a two part unfilled electronic grade epoxy encapsulant designed for small to medium sized castings. It cures at room temperature to a tough, semi-rigid polymer. It has good wetting and adhesion to most surfaces and is free flowing to penetrate voids and give good air release and a smooth high gloss surface. It has very good resistance to water, acids and bases and most organic solvents. It was especially formulated to a 1A:1B volume mix ratio for use in side-by-side dispensing cartridges and meter/mix and dispense equipment. EP965LVLX Black will reach full cure at room temperature within 24 hours. Cure time can be accelerated by the application of heat after product has gelled. Times and temperatures from 1 hour at 65°C to 20 minutes at 110°C are typical for small castings (less than 50 grams). Information Provided by Resinlab L.L.C., an Ellsworth Adhesives Company.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Resinlab-EP965LVLX-Black-Unfilled-Electronic-Grade-Epoxy-Encapsulant.php](http://www.lookpolymers.com/polymer_Resinlab-EP965LVLX-Black-Unfilled-Electronic-Grade-Epoxy-Encapsulant.php)

Physical Properties	Metric	English	Comments
Specific Gravity	0.980 g/cc	0.980 g/cc	Part B; TM R050-16
	1.05 g/cc	1.05 g/cc	Mixed; TM R050-16
	1.13 g/cc	1.13 g/cc	Part A; TM R050-16
Water Absorption	0.20 %	0.20 %	TM R050-35
	@Time 86400 sec	@Time 24.0 hour	
Viscosity	2000 cP	2000 cP	Part B, RVT, #5, 20 rpm; TM R050-12
	2500 cP	2500 cP	Mixed; TM R050-12
	3000 cP	3000 cP	Part A, RVT, #5, 20 rpm; TM R050-12

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	80	80	TM R050-17
Tensile Strength at Break	27.6 MPa	4000 psi	TM R050-36
Tensile Strength, Ultimate	31.0 MPa	4500 psi	TM R050-36
Tensile Strength, Yield	13.8 MPa	2000 psi	TM R050-36
Elongation at Break	5.0 - 8.0 %	5.0 - 8.0 %	TM R050-36
Tensile Modulus	1.72 GPa	250 ksi	TM R050-36
Compressive Yield Strength	27.6 MPa	4000 psi	TM R050-38
Compressive Strength	114 MPa	16500 psi	Ultimate; TM R050-38

Mechanical Properties	114 MPa Metric	16500 psi English	Break: TM R050-38 Comments
Compressive Modulus	1.59 GPa	230 ksi	TM R050-38
Adhesive Bond Strength	6.89 MPa	1000 psi	Lap shear; 2024 T3 Al Abraded / MEK Wipe; TM R050-37

Thermal Properties	Metric	English	Comments
CTE, linear	60.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	33.3 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	
Thermal Conductivity	0.140 W/m-K	0.972 BTU-in/hr-ft <sup>2</sup> -°F	
Maximum Service Temperature, Air	121 °C	250 °F	
Minimum Service Temperature, Air	-40.0 °C	-40.0 °F	
Glass Transition Temp, Tg	60.0 °C	140 °F	TM R050-25

Electrical Properties	Metric	English	Comments
Volume Resistivity	8.00e+14 ohm-cm	8.00e+14 ohm-cm	
Dielectric Constant	4.2	4.2	
	@Frequency 100 Hz, Temperature 25.0 °C	@Frequency 100 Hz, Temperature 77.0 °F	
Dielectric Strength	16.1 kV/mm	410 kV/in	

Processing Properties	Metric	English	Comments
Pot Life	8.0 - 12 min	8.0 - 12 min	Mass: 50g; TM R050-19

Descriptive Properties	Value	Comments
Color	Black	
Mix Ratio	1:1	Volume
	100:85	Weight

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China