

Resinlab® EP1112 Black Electronic Grade Epoxy Encapsulant

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

Material Notes:

Resinlab™ EP 1112 Black is a two part unfilled fast curing electronic grade epoxy encapsulant designed for small to medium sized castings. It cures completely at room temperature to a tough, flexible polymer. Its low viscosity allows for good wicking and penetration into components and circuitry and also gives good air release. It has very good resistance to water, acids and bases and most organic solvents. Thermal shock and cycling properties are also enhanced by its high elongation giving it the ability to absorb difference in CTE's of substrates. 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. EP 1112 Black will reach full cure at room temperature within 6 to 12 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 10 minutes at 100°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-EP1112-Black-Electronic-Grade-Epoxy-Encapsulant.php

Physical Properties	Metric	English	Comments
Specific Gravity	0.960 g/cc	0.960 g/cc	Part B
	1.04 g/cc	1.04 g/cc	Mixed
	1.11 g/cc	1.11 g/cc	Part A
Viscosity	1200 cP	1200 cP	Part A
	1200 cP	1200 cP	Part B
	1200 cP	1200 cP	Mixed

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	70	70	
Tensile Strength, Ultimate	8.27 MPa	1200 psi	
Tensile Strength, Yield	4.14 MPa	600 psi	
Elongation at Break	50 %	50 %	
Elongation at Yield	3.0 - 5.0 %	3.0 - 5.0 %	
Tensile Modulus	0.138 GPa	20.0 ksi	
Compressive Yield Strength	4.83 MPa	700 psi	
Compressive Strength	93.1 MPa	13500 psi	
Compressive Modulus	2.76 GPa	400 ksi	

Adhesive Bond Strength Mechanical Properties	8.27 MPa Metric	1200 psi English	Lap shear: 2024 T3 Al Abraded / MEK Wipe Comments
---	--------------------	---------------------	--

Thermal Properties	Metric	English	Comments
CTE, linear	62.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	34.4 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	
Thermal Conductivity	0.170 W/m-K	1.18 BTU-in/hr-ft ² -°F	
Maximum Service Temperature, Air	150 °C	302 °F	
Minimum Service Temperature, Air	-40.0 °C	-40.0 °F	
Glass Transition Temp, Tg	42.0 °C	108 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	4.00e+14 ohm-cm	4.00e+14 ohm-cm	
Dielectric Constant	4.1	4.1	
	@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	10 - 15 min	10 - 15 min	Mass: 50g

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

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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