

## Resinlab® EP1195 Flame Retardant Epoxy Casting Resin

Category : Polymer , Thermoset , Epoxy , Epoxy Cure Resin

**Material Notes:**

Resinlab™ EP1195 is a low viscosity, fast gelling, flame retardant epoxy casting resin system. It is recognized under the Component Recognition Program of Underwriters Laboratories Inc., (File # E186034, Project 96NK25676) for UL Standard 94. EP1195 qualifies for a horizontal burn rating of 94 HB at 1/16" thickness. It also gives excellent resistance to water, salt spray, and good resistance to most inorganic acids and bases and organic solvents. It was especially formulated to a 2:1 volume mix ratio for use in either MMD equipment or side by side dual cartridges for easy dispensing. Cure is normally achieved at room temperature although an elevated temperature cure schedule can be used to reach final properties quickly after product has gelled. Information Provided by Resinlab L.L.C., an Ellsworth Adhesives Company.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Resinlab-EP1195-Flame-Retardant-Epoxy-Casting-Resin.php](http://www.lookpolymers.com/polymer_Resinlab-EP1195-Flame-Retardant-Epoxy-Casting-Resin.php)

Physical Properties	Metric	English	Comments
Specific Gravity	0.970 g/cc	0.970 g/cc	Part B; TM R050-16
	1.24 g/cc	1.24 g/cc	Mixed; TM R050-16
	1.37 g/cc	1.37 g/cc	Part A; TM R050-16
Water Absorption	0.18 %	0.18 %	TM R050-35
	@Time 86400 sec	@Time 24.0 hour	
Viscosity	1000 cP	1000 cP	Part B, RVT, #2, 20 rpm; TM R050-12
	6000 cP	6000 cP	Mixed; TM R050-12
	8000 cP	8000 cP	Part A, RVT, #5, 20 rpm; TM R050-12

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	85	85	TM R050-17
Tensile Strength at Break	27.6 - 31.0 MPa	4000 - 4500 psi	TM R050-36
Tensile Strength, Ultimate	27.6 - 31.0 MPa	4000 - 4500 psi	TM R050-36
Tensile Strength, Yield	10.3 MPa	1500 psi	TM R050-36
Elongation at Break	1.0 - 2.0 %	1.0 - 2.0 %	TM R050-36
Tensile Modulus	3.10 GPa	450 ksi	TM R050-36
Compressive Yield Strength	68.9 MPa	10000 psi	TM R050-38
Compressive Strength	138 MPa	20000 psi	Break; TM R050-38

Mechanical Properties	138 MPa Metric	20000 psi English	Ultimate <sup>TM</sup> R050-38 Comments
Compressive Modulus	2.07 GPa	300 ksi	TM R050-38
Adhesive Bond Strength	20.7 MPa	3000 psi	Lap shear; 2024 T3 Al Abraded / MEK Wipe; TM R050-37

Thermal Properties	Metric	English	Comments
CTE, linear	42.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	23.3 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	
Thermal Conductivity	0.200 W/m-K	1.39 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	70.0 °C	158 °F	TM R050-25

Electrical Properties	Metric	English	Comments
Volume Resistivity	8.00e+14 ohm-cm	8.00e+14 ohm-cm	
Dielectric Constant	4.5	4.5	
	@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
Pot Life	15 - 20 min	15 - 20 min	Mass: 50g; TM R050-19

Descriptive Properties	Value	Comments
Color	Black	
Mix Ratio	100:36	Weight
	2:1	Volume

## Contact Songhan Plastic Technology Co.,Ltd.

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