

EPOXY 100207-1

FIRE RETARDANT EPOXY BASED ENCAPSULATION POLYMER (UL-94-V0)

TECHNICAL DATA

Product Description

Epoxy 100207-1 is a room temperature curing, two part epoxy system designed to be used to encapsulate electronic packages. This product has been designed to provide the user with an easy to work with one to one by volume mix-ratio. Once encapsulated with Epoxy 100207-1, an electronic package will exhibit a higher resistance to both physical shock as well as exposure to water and other potentially harmful chemicals. This product is ROHS compliant and it meets the requirements as specified by the UL VO fire retardant test procedure.

APPLICATIONS

- Electronic encapsulation

FEATURES

- Convenient two part mix ratio
- Moisture and chemically resistant
- Room temperature cure
- ROHS compliant
- Fire retardant

RECOMMENDED SUBSTRATES

BIOCOMPATIBILITY

UNCURED PROPERTIES*

Property	Value	Test Method
Solvent Content	No Nonreactive Solvents	N/A
Chemical Class, PT A:B	Epoxy : Amine	N/A
Color, PT A:B	Black : Off-white	N/A
Specific Gravity, PT A:B	1.3 : 1.1	N/A
Viscosity @ 25°C, cps, PT A:B	12,500 : 7000	ASTM D 1084

CURED MECHANICAL PROPERTIES*

Property	Value	Test Method
Durometer Hardness, Shore D	70	ASTM D 2240
Moisture Resistance	Excellent	N/A
Operating Temperature Range, °C	-60 to 125	N/A
Tensile Strength, psi	>1,000	ASTM D638
Tensile Lap Shear, Al/Al, psi	1,500	ISO 4587
Shrinkage, %	<5	N/A
Dielectric Strength, Volt/Mil	>400	ASTM D149
Dissipation Factor, 1MHz @ 25°C	0.02	ASTM D149

CURE OVERVIEW*

Property	Value	Test Method
Mix Ratio by Volume, Resin:Hardener	1:1	N/A
Work Life @ room temperature, min	90	N/A
Gel Time @ room temperature, 20g, min	120	N/A
Cure Time @ room temperature, 20g, hr	12-24	N/A
Cure Time @ 65C, 20g, min	40	N/A

Storage:

Store material in cool, dry location at a temperature between 10°C to 28°C. Keep from freezing. Refer to packaging specific quote for shelf life information. Consult MSDS for safe handling recommendations.

Revision Number: 2 Date: 12 September, 2011

Resin Designs, LLC 11 State Street Woburn, MA 01801 www.resindesigns.com P 781-935-3133 F 781-935-3144

Resin Designs, LLC makes no express or implied warranties or merchantability, fitness or otherwise with respect to this product. In addition, while the information contained herein is believed to be reliable, no warranty is express or implied regarding the accuracy of the results to be obtained from the use thereof. The properties given are typical values and are not intended for use in preparing specifications. User should make their own test to determine the suitability of this product for their own purposes.