Technical Data Sheet

HYSOL® EO8012

Formerly Loctite® 99720
Liquid Epoxy Encapsulant

Formerly Dexter

Description

Hysol® EO8012 (formerly Loctite® 99720) epoxy, is a filled, flame retardant, heat activated, fast cure, 100% solids, low cost, one-part potting compound. It is UL recognized to UL-94-V-0, ¼" thickness testing. A low viscosity allows for complete impregnation of small parts. Also, UL 1446 recognized as a potting material insulating systems to 180ºC.

Application Characteristics	EO8012	Test Method
Viscosity, cps @ 25ºC	8,000	STP 2A
Gel Time, 30 gm mass @ 121ºC	30 minutes	
Cure Cycle,		
Normal @ 121ºC	2 hours*	
Alternate @ 104ºC	4 - 5 hours*	
*Note: Cure time listed is the time required after the system and the unit reaches the cure temperature.		
Color	Black	Visual
Specific Gravity, (Density, lbs./gal.)	1.60 (13.4)	RTP 549A
Shelf Life, in cool, dry conditions	4 months	

Typical Cured Properties		EO8012	Test Method
Hardness, Shore D		85	STP 11A
Flammability, 0.125" thickness		Pass	94-V0
Tensile Strength, psi		2540	STP 38A
Moisture Absorption (24 hrs), %		0.01	STP 109A
Weight Loss, %, 168 hrs	@ 155ºC	0.07	
	@ 180ºC	0.08	
Thermal Conductivity, BTU/in		4.7	STP 47C

Typical Electrical Properties		EO8012	Test Method
Dielectric Strength, volts/mil		949	STP 48D
		25°C	
Dielectric Constant	@ 100Hz	4.9	STP 53A
	@ 1KHz	4.7	
	@ 100KHz	4.4	
Dissipation Factor	@ 100Hz	0.03	STP 53A
	@ 1KHz	0.02	
	@ 100KHz	0.02	
Volume Resistivity, ohm/cm		1.3×10^{15}	STP 30H01
Arc Resistance, seconds		179	

Directions for Use

1. This is a one-component system, which has a shelf life of 4 months. Freeze or refrigerate to extend shelf life.
2. If frozen or refrigerated, allow 24 – 48 hours for the product to reach room temperature.
3. Apply product.
4. Use low speed mixing to reduce air entrapment. If air bubbles persist, place unit under vacuum.
5. Cure mixture according to the above cycle. Cure time is measured after the product reaches curing temperature.

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For additional information in the Americas, please contact one of the following locations:

New York	**Canada**	**Brazil**
TEL: 716.372.6300	TEL: 905.814.6511	TEL: 011.55.11.4143.7000
FAX: 716.372.6864	FAX: 905.814.5391	FAX: 011.55.11.4143.7100

For a complete listing of worldwide locations and information on related products, please visit our website **www.loctite.com/electronics**

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Users should review the Material Safety Data Sheet (MSDS) and product label for the material to determine possible health hazards, appropriate engineering controls and precautions to be observed in using the material. Copies of the MSDS and label are available upon request

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