

# Leepoxy Plastics, Inc.

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## TECHNICAL BULLETIN LEECAST E16063-1

### Description

LEECAST E16063-1 is a two-part epoxy potting system used in UL-listed electrical applications. LEECAST E16063-1 combines superior heat conductivity with electrical properties. This system is highly filled and viscous at room temperature, a necessary requisite of systems having exceptional thermal conductivity. The filler used is a carefully selected blend designed to minimize both abrasion and settling. LEECAST E16063-1 is formulated to provide the highest performance properties with a minimum of handling problems.

TYPICAL PROPERTIES		
	Part A	Part B
Appearance	Black liquid	Yellow liquid
Thixotropy @ 25°C, cps	926,000	100
Viscosity @ 25°C, cps	220,000	100
Density, lbs./gal.	14.6	8.1
Shelf Life, months	6	6

### Directions for Use

The pot life of LEECAST E16063-1 is practical for both manual and automatic meter-mix dispense processing. After mixing, it can be cured at either room or elevated temperature. The cure schedule for a room temperature cure (25°C) is 16 hours. For quicker throughput, cure can be achieved by allowing the material to set at room temperature for two hours followed by a post cure of 80°C for one hour.

TYPICAL HANDLING PROPERTIES		
	Part A	Part B
Mix Ratio, by weight	100	10
Mixed Color	Black	
Gel Time @ 25°C, 100 g, min	45	
Cure Schedule	16 hours @ 25°C	
Alternate Cure Schedule	2 hours @ 25°C + 1 hour @ 80°C	

TYPICAL PERFORMANCE		
Hardness, Shore D	80	
Dielectric Strength, 25°C, volts/mil	425	
Dielectric Constant, 25°C, 1 mHz	4.8	
Dissipation Factor, 25°C, 1 mHz	0.02	
Volume Resistivity, ohm-cm, 25°C	1 x 10 <sup>15</sup>	
	, 70°C	1 x 10 <sup>13</sup>
	, 100°C	1 x 10 <sup>9</sup>
Tensile Strength, psi	10,000	
Tensile Elongation, %	6.5	
Thermal Conductivity, x 10 <sup>-3</sup> , cal cm/sec cm <sup>2</sup> °C	1.82	

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