

Leepoxy Plastics, Inc.

3706 W. Ferguson Rd., Fort Wayne, IN 46809

Phone: (260) 747-7411 Fax: (260) 747-7413

TECHNICAL BULLETIN LEECAST E29192-1

Description

LEECAST E29192-1 is a two-part epoxy compound designed for potting electrical and electronic components. The advantages of LEECAST E29192-1 include flame retardation, good thermal shock resistance, good electrical properties, non-abrasive filler, easy 2 to 1 mix ratio, and room temperature cure.

TYPICAL PROPERTIES		
	Part A	Part B
Appearance	Off-white liquid	Black liquid
Viscosity, 25°C, cps	5,500	2,250
Density, lbs/gal	11.6	11.7
Shelf Life, months	12	12

Mixing and Curing

LEECAST E29192-1 can be mixed, de-aired, poured and cured at room temperature. Measure out Part A and B and mix thoroughly, scraping the sides and bottom of the container. The final mixed color is black. For void-free castings, de-air under vacuum and cast around components.

TYPICAL HANDLING PROPERTIES

	Part A	Part B
Mix Ratio, by volume	100	50
, by weight	100	50
Gel Time, 25°C, 100g, min	120	

The gel time of LEECAST E29192-1 depends on temperature and mass of material. Large masses and/or elevated temperatures will shorten the gel time. Cure can be accomplished at room temperature or with heat if faster cures are desired. Typical cure schedules for small masses are:

50°C	4 – 8 hours
80°C	1 – 2 hours
100°C	40 – 60 minutes

TYPICAL PERFORMANCE

Hardness, Shore D	82
Glass Transition Temperature, °C	118
Dielectric Strength, 25°C, volt/mil	400
Dielectric Constant, 25°C, 1 MHz	4.4
Dissipation Factor, 25°C, 1 MHz	0.022
Volume Resistivity, 25°C, ohm-cm	1.0×10^{14}
Thermal Conductivity, cal cm/sec cm ² °C	1.15×10^{-3}
Coefficient of Thermal Expansion, -40 – 110°C, in/in °C	76.5×10^{-6}
Coefficient of Thermal Expansion, 120 – 180°C, in/in °C	144×10^{-6}

The Information contained herein is correct to the best of our knowledge. The recommendations or suggestions contained in this bulletin are made without guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory prior to use. Our responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the purchase price of the material. Freedom to use any patent owned by Leepoxy Plastics, Inc. or others is not to be inferred from any statement contained herein.

Leepoxy Plastics, Inc. April 2003