

Leepoxy Plastics, Inc.

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EPOXY ANODE POTTING COMPOUNDS

Since 1972, Leepoxy has served the cathodic protection industry with its proprietary LEECAST E22099-6 series of epoxy anode potting compounds. This series consists of one common epoxy resin (LEECAST E22099-6 A) and three alternative curing agents (LEECAST E22099-6 B, LEECURE E-36 or LEECURE E-6). Each A/B combination provides a different work life and cure time ---and consequently, different shrinkage tendencies in large mass pottings. One of these three combinations of Parts A/B will provide the fastest cure time with the fewest number of pours to avoid shrinkage.

This series was formulated specifically to withstand the rigors of deep underground and underwater environments. It features excellent water and chemical resistance, superior impact resistance and excellent adhesion to graphite and cast iron.

Superior performance properties explain its impressive in-field track record for more than 30 years.

In addition, these user-friendly handling properties also explains its appeal:

1. Simple, forgiving 1 A: 1 B mix ratio by volume, allowing “eye ball” measurement of equal volumes of A and B.
2. Low viscosity for easy pouring, mixing, dispensing, bubble release and excellent surface wetting.
3. Room temperature cure that can be accelerated, if desired, by introducing heat.
4. No filler content in either the A or B component and, therefore, no possibility of filler settling and no need to stir contents of each component before using.

	LEECAST E22099-6 A	LEECAST E22099-6 B	LEEURE E-36	LEEURE E-6
Appearance	Straw-colored liquid	Black liquid	Black liquid	Black liquid
Viscosity @ 25°C, cps	13,000	3,300	2,400	400
Density, lbs/gal	9.6	8.0	7.9	8.0
Shelf Life, months	12	12	12	12
TYPICAL HANDLING PROPERTIES				
Mix Ratio,				
Parts by volume	100	100	100	100
Parts by weight	100	83	83	83
Gel Time @ 25°C, 100 g, min		9	38	48
Cure Time @ 25°C, hours		24	24	48

	TYPICAL CURED PROPERTIES			
	LEECAST E22099-6 A	LEECAST E22099-6 B	LEECURE E-36	LEECURE E-6
Hardness @ 25°C, Shore D		>85	>85	>85
Tensile strength psi		6,000	6,000	6,000
Elongation, %		>4	7	>10

Directions for Use

Choosing the most appropriate Part B and determining practical batch size depends primarily on the ambient temperature of the epoxy, the size of the anode, and the number of anodes to be potted from that batch. Measure equal volumes of Parts A and B, and pour into a clean, dry mix vessel. Mix thoroughly at moderate speed to prevent undue turbulence and to minimize air entrapment. Scrape the bottom and sides of the mix vessel continuously to assure a thorough mix.

Preclude or limit shrinkage and out-gassing (bubbling or foaming during gellation) by a prudent determination of the number of pours. Even the combination LEECAST E22099-6 A/ Leecure E-6 at 70°F will shrink in a one-gallon cavity if potted in one pour. If shrinkage occurs, prepare another batch to fill the voids, “pullaways”, and any top surface craters or pock marks.

Store all epoxy components at 70 – 85°F in closed containers. Avoid moisture

exposure by keeping all containers tightly sealed and avoid headspace for lengthy periods in partially filled containers. Consult the Material Safety Data Sheets for guidance in the safe handling of this product. If potting or curing at elevated temperature, utilize adequate ventilation, avoid breathing fumes or vapors as well as frequent or continuous skin contact.

Reactivity data is provided for 100 gram masses (roughly 4 fluid ounces) potted at 77°F. Larger masses, higher temperature, longer dwell time in the mix vessel before dispensing --- these factors shorten gel and cure times. Smaller masses, lower temperatures, heat-sink effects of the anode material (cast iron especially) -- these factors lengthen gel and cure times.

“Green strength” occurs when the potted epoxy is tack-free. At this point the anodes can be handled, moved, or packaged. However, holding the anode by the “pigtailed” or otherwise subjecting it to stress should wait until the epoxy has fully cured.

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.