

# Leepoxy Plastics, Inc.

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## TECHNICAL BULLETIN

### LEEPOXY E08046-1

#### Freon-resistant magnet wire patching epoxy

#### Description

LEEPOXY E08046-1 is a proprietary Freon-resistant two-part epoxy specifically developed for patching magnet wire coatings in refrigeration motors whose wires are scraped, nicked, or chipped, thus exposing the copper substrate. It is thixotropic enough not to drip or slump off the wire after application, even during immediate 300°F cure. With either an immediate or post heat-cure, it forms a highly cross-linked thermoset plastic with excellent adhesion, mechanical and electrical properties. Resistance to Freon is excellent, but only after sufficient heat cure. That cure can occur anytime—even during dehydration, varnish cure, or other in-house processes--prior to exposure to Freon.

The burgundy color of LEEPOXY E08046-1 approximates that of magnet wire.

#### Directions for Use

Since only small quantities of patching compound may be needed, it is especially important that the two components of LEEPOXY E08046-1 be weighed accurately. Weigh into a clean dry vessel 100 parts of Part A and 19 parts of Part B. Mix thoroughly, scraping the sides and bottom of the vessel continuously. Wipe the area to be coated with a clean cloth wetted with xylene.

Let dry several minutes; then apply the mixed LEEPOXY E08046-1 A/B epoxy. If the patched wire is to go through the dehydration process or a subsequent varnish dip followed by a one to two hour bake at 250° – 275°F, then only a room temperature set of the patching compound is necessary at the time of application. In any event, optimal performance properties are realized by elevated temperature cure at any time prior to exposure to Freon or to other harsh refrigerants. Suggested cure cycles are listed below.

Typical Properties		
	Part A	Part B
Appearance	Burgundy paste	Colorless liquid
Mix ratio, by weight	100	19
Thixotropy, 25°C, cps	1,000,000	20
Viscosity, 25°C, cps	200,000	20
Shelf Life, months	12	12
Density, lbs/gal	9.0	8.0

Typical Handling Properties	
Gel Time, 25°C, 100 g, min.	45
Work Life, 25°C, 20 g, min.	60 – 120
Cure Time, 125°C, hours	2
Suggested Cure Schedules	4 hours @ 100°C
	2 hours @ 125°C
	1 hour @ 150°C

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

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