

TECHNICAL DATA SHEET

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DOLPHON[®] CR-1035

RED EPOXY CASTING RESIN KIT

PRODUCT DESCRIPTION

CR-1035 is a semi-rigid, two-part, room temperature curing epoxy resin specifically formulated for encapsulation. It has the following outstanding features:

- 1. Supplied in kit form for easy measuring of resin and reactor
- 2. Excellent electrical and physical properties
- 3. Good thermal conductivity
- 4. Cures quickly at room temperature
- 5. Low Viscosity for good penetration
- 6. Good machinability of cured resin

TYPICAL APPLICATIONS

Stators

Control Coils

Electrical & Electronic Parts

Solenoid Coils

Electric Motors

CHARACTERISTICS

Color/Appearance	Red
Tensile Strength, p.s.i. – ASTM D-638-60T	8,500
Thermal Conductivity cal./sec./cm ² /℃./cm	6 x 10 ⁴
Water Absorption, % ASTM D-570-59aT	0.3
Hardness, Shore D	75
Dielectric Strength, 1/8" specimen, volts/mil	410
Surface Resistivity, ohms	5.0 x 10 ¹²
Volume Resistivity, ohm-cm	6.0 x 10 ¹³
Chemical Resistance (most solvents, acids and bases)	Excellent

MIXING

Mix premeasured resin and reactor slowly to avoid stirring excessive air into the mixture. To assure thorough blending, scrape the side of the container during mixing. NOTE: A 50 pound kit is supplied with a graduate cylinder. Mix 32 cc (grams) of reactor to 1 pound of resin.

POT LIFE

The pot life of the mixed compound will be approximately 1 ½ hours at 70°F, depending on quantity of material being mixed. Ingredients should be kept covered to prevent contamination or absorption of moisture during storage.

PACKAGING

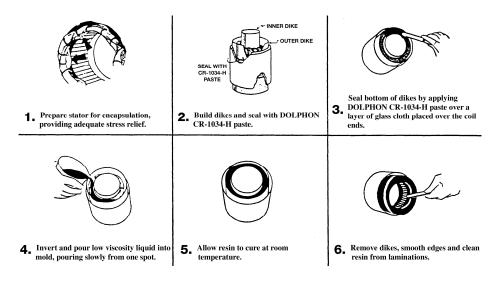
CR-1035 is conveniently packaged in 1 pound, 2 pound, 8 pound and 50 pound kits.

PREPARATION OF UNIT

- 1. Varnish impregnation is not required with this method. However, the laminations should be dipped and baked in Dolphon epoxy varnish or a Hi-Therm varnish prior to winding. This step prevents resin from leaking through the laminations.
- 2. Construct molds of materials that will release easily from epoxy casting. (See Step 2 below)
- 3. Preheat unit (220-250°F) and cool to 110-130°F b efore pouring compound.

APPLICATION

Seal bottom end of dike by applying Dolphon CR-1035-B epoxy resin paste. Paste will gel in 2-3 hours. Then tilt unit and slowly pour the mixed low viscosity Dolphon CR-1035 resin into mold in one spot only. This will avoid entrapment of air. (See step 4 below)



CURE

Gels at room temperature in 1 to 2 hours and cures overnight. To accelerate cure, bake for 3 hours at 150°F. CAUTION: May cause skin irritation or eye injury. Wash exposed area with soap and water immediately after contact. Use in well-ventilated area.

STORAGE AND SHELF LIFE

Store in a cool (65-75 $\mathbb{F}/18$ -24 \mathbb{C}) dry place away fr om direct sunlight. Shelf life in one year @ 77 \mathbb{F} (25 \mathbb{C}) or cooler.

SAFETY AND ENVIRONMENT

See Material Safety Data Sheet.