



# 20-3065 NC LOW VISCOSITY POTTING & ENCAPSULATING RESIN

## DESCRIPTION:

20-3065 NC is a general purpose, low viscosity epoxy potting and encapsulating resin system. This is a 100% solids system. It therefore does not contain any solvents.

20-3065 NC is a filled system resulting in excellent dimensional stability and extremely low shrinkage. 20-3065 NC is characterized by exceptional resistance to impact, vibration, and thermal shock. In addition, this versatile resin system is machinable; can be cut, drilled and tapped. It is ideal for use with meter mix dispensing equipment.

20-3065 NC has found wide acceptance as a potting and encapsulating compound for applications such as transformers, coils, chokes, solenoids, resistors, modules, micro circuitry, resistors, capacitors, etc...

## TYPICAL SPECIFICATIONS:

Viscosity, Resin, 25°C cps	9,000
Pot Life w/ Catalyst 30, @ 25°C	> 4 Hours
Pot Life w/ Catalyst 150, @ 25°C	60 Minutes
Pot Life w/ Catalyst 190, @ 25°C	45 Minutes
Specific Gravity, 25°C	1.56
Hardness, Shore D	88
Cure Shrinkage, in/in	0.002
Tensile Strength, psi	7,000
Compressive Strength, psi	15,600
Operating Temp. Range, °C	-70 to +180
Dielectric Strength, V/mil	460
Dielectric Constant at 100 Hz	4.52
Volume Resistivity, ohm cm, 25°C	$3.99 \times 10^{14}$
Dissipation Factor, 100 Hz	0.01
Thermal Conductivity, W/m- °K	0.65
Thermal Expansion Coefficient, °C	$40 \times 10^{-6}$
Flexural Strength, psi	12,500
Izod Impact, ft-lb/in.	0.26
Flexural Modulus, psi	$.2 \times 10^6$

## **INSTRUCTIONS FOR USE:**

### ROOM TEMPERATURE CURING WITH CATALYST 190

Catalyst 190 is designed for applications requiring a room temperature curing system with excellent physical and electrical insulation properties.

1. By weight, thoroughly mix 8 parts Catalyst 190 to 100 parts 20-3065 resin.
2. Pour and allow to cure according to one of the following schedules:
  - 25°C 16-24 Hours
  - 45°C 4-6 Hours
  - 65°C 1-2 Hours

### ROOM TEMPERATURE CURING WITH CATALYST 150

Catalyst 150 is low in viscosity and has a long pot life. It is excellent for thermal shock, impact resistance and low temperature properties.

1. By weight, thoroughly mix 20 parts Catalyst 150 to 100 parts 20-3065 NC resin.
2. Pour and cure at room temperature overnight or for 2 hours @ 66°C (155°F).

### HEAT CURING WITH CATALYST 30 (Recommended for higher operating temperature and physical property applications):

Catalyst 30 is designed for applications requiring the optimum in electrical insulation, physical, and thermal properties.

1. By weight, thoroughly mix 15 parts Catalyst 30 to 100 parts 20-3065 NC resin.
2. Pour and cure according to one of the following recommended cure schedules:
  - a) 85°C (185°F) 3-4 hours
  - b) 100°C (212°F) 2-3 hours

For optimum performance, an additional 2 hours @ 365°F (185°C) is recommended.

## **IMPORTANT:**

**EPOXIES, ETC. MAKES NO EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS OR OTHERWISE WITH RESPECT TO ITS PRODUCTS.** The information in this brochure is based on data obtained by our own research and is considered reliable. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. The properties given are typical values and are not intended for use in preparing specifications. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.

09/14