EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

# 50-3116
# THERMALLY CONDUCTIVE FLEXIBLE EPOXY RESIN

## DESCRIPTION:

50-3116 thermally conductive flexible epoxy formulation is designed for applications that require low stress during cure and electrical insulation.

50-3116 is a low viscosity system that is most commonly used for potting and encapsulating power supplies, transformers, regulators, motors, capacitors, batteries, coils etc. This system is excellent in applications that require a compound to remain flexible for long term aging. This system has a low peak exotherm, making it ideal for large castings.

The 50-3116 resin and catalyst are sold in convenient quart kits, gallon kits, 5-gallon pails, and 55-gallon drums. This system is also available in premixed and frozen syringes.

## TYPICAL PROPERTIES:

| | |
|---|---|
| Viscosity, 25°C, cps | |
| Resin | 13,100 |
| Catalyst | 400 |
| Mixed | 10,200 |
| Mix Ratio (Resin:Catalyst) | |
| By Weight | 200:5.4 |
| Color | Black |
| Hardness, Shore A | 80 |
| Operating Temperature Range, °C | -70 to +150 |
| Pot Life, 100 grams, 25°C | 3 hours |
| Specific Gravity, 25°C | 1.54 |
| | |
| Dielectric Strength, V/mil | 480 |
| Dielectric Constant, 60 Hz | 3.8 |
| Volume Resistivity, 25°C, ohm-cm | $1.5 \times 10^{15}$ |
| Dissipation Factor, 60 Hz | 0.15 |
| | |
| Thermal Conductivity, W/m-K | 1.01 |

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## INSTRUCTIONS FOR USE:

1. Agitate 50-3116 resin thoroughly to re-disperse fillers. Some settling during transit or storage is common.
2. Mix 100 parts 50-3116 Resin to 5.4 parts 50-3116 Catalyst by weight.
3. Follow one of the cure schedules below:
   a) 25°C 24 hours
   b) 65°C 2-4 hours

## STORAGE, HANDLING, & SAFETY:

Store both components at 25 °C in original containers. The expected shelf life is 12 months in original containers.

Please read the Safety Data Sheet before using this or any other chemical.

## AVAILABILITY:

50-3116 is available in 4oz, 16oz, quart, and 1 gallon containers.

## IMPORTANT:

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