

# 10-3039

## Epoxy Adhesive System

### DESCRIPTION:

10-3039 is a high viscosity, room temperature curing, two component epoxy. The 10-3039 Epoxy System meets the Food and Drug Administration (FDA) regulations permitting use in “indirect” food contact applications. The raw materials used in the products comply with the FDA regulations of Title 21 Code of Federal Regulations under Sections 175.105 and 175.300.

### FEATURES:

- Excellent adhesion
- Excellent chemical and corrosion resistance
- Excellent electrical insulation

### TYPICAL SPECIFICATIONS:

Color	White
Viscosity, 25°C, CPS	
Resin	175,000
Catalyst	800,000
Mix Ratio (Resin: Catalyst)	
By weight	100:40
Specific Gravity, 25°C	
Resin	1.28
Catalyst	0.99
Working time, 100 gram mass, 25°C	90 minutes
Operating temperature range, °C	-40°C\ -40°F to 130°C\ 266°F
Intermittent operating temperature limit	140°C\ 285°F
Tensile Strength, PSI	8,600
Tensile Modulus, PSI	38.0 X 10 <sup>4</sup>
Tensile Elongation, %	3.7
Flexural Strength, PSI	13,000
Flexural Modulus, PSI	5.0 X 10 <sup>4</sup>
Compressive Strength, PSI	33,000
Compressive Modulus, PSI	28.0 X 10 <sup>4</sup>
Hardness, Shore D	83

**CHEMICAL RESISTANCE:**

Percent weight gain:

<u>Water</u>		<u>5% Acetic Acid</u>	
24 Hours	0.12	24 Hours	0.58
7 Days	0.46	7 Days	0.72
<u>50% Xylene / 50% Isopropanol</u>			
24 Hours	2.89		
7 Days	.07		

Specimens were cured at 25°C for 24 hours plus 2 hours at 100°C. Cured samples were immersed at 23°C.

**PREPARATION OF SURFACES:**

Surfaces must be clean and grease free. Adhesion can be substantially increased by abrading the surfaces to be bonded with emery cloth, sandpaper, carbide grinding tools, sand blasting, etc...A roughened, porous surface will produce the best results. Any oxidized metal films should be removed just prior to application of the epoxy adhesive mixture.

**INSTRUCTIONS FOR USE:**

1. By weight, thoroughly mix epoxy resin and curing agent according to mix ratio provided in the above table.
2. Apply mixed material and follow one of the cure schedules:
  - a. 77°F                    24 hours
  - b. 150°F                 1 hour
  - c. 220°F                 15 minutes

**FDA COMPLIANCE:**

Epoxies, Etc. does not warranty that these products would be suitable under applicable FDA regulations for any use.

The responsibility for determining the overall compliance with applicable FDA food additive/contact regulations is with the company manufacturing the final finished product and/or the person placing that product in food contact.

**SAFETY, STORAGE, AND HANDLING:**

Please refer to the MSDS for the most current safety and handling information. Read the MSDS before using these products.

The shelf life is 12 months in the original sealed container when stored between 50-77°F. Store away from excessive heat and humidity.

**IMPORTANT:**

The information in this brochure is based upon data obtained by our own research and is considered accurate. 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. This information is furnished upon the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.

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