

# 10-3216 TOUGHENED 1:1 RATIO EPOXY ADHESIVES

#### **DESCRIPTION:**

10-3216 is a toughened, flexible, and impact resistant epoxy adhesive. 10-3216 is a two component system that forms strong structural bonds at room temperature. This unique adhesive system provides high peel and shear strengths. 10-3216 is excellent for bonding many metals and woods, most plastics and rubbers and masonry products. This system is designed for electronic, aerospace and other demanding industrial applications.

This product is available in the popular TriggerBond® dual barrel cartridge system.

10-3216 is also available in a translucent unfilled version: 10-3216TR.

# FEATURES:

- Impact resistant
- Excellent electrical insulator
- High peel and shear
- Outstanding structural bonds
- Convenient 1:1 Ratio
- Retention of strength after environmental aging

# **TYPICAL PROPERTIES:**

	<u>10-3216 Gray</u>	<u>10-3216 TR</u>
Viscosity, 25°C, cps	-	
10-3216RCL Resin	10,000	10,000
10-3216C Catalyst	82,000	7,000
10-3216 Mixed	150,000	27,000
Color	Gray	Translucent
Gel time, 100 grams, 25°C	70 Minutes	60 Minutes
Hardness, Shore D	70	65
Operating Temperature Range, °C	-50 to +110	-50 to +110
Specific Gravity, 25°C,		
10-3216RCL Resin	1.32	1.15
10-3216C Catalyst	1.20	0.96
Tensile Shear Strength, psi	2,600	2,600
Dielectric Strength, V/mil	410	630
Dielectric Constant, 60 Hz	4.4	4.1
Dissipation Factor, 60 Hz	0.02	0.02

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Volume Resistivity, ohm-cm	1.1 x 10 <sup>15</sup>	4.0 x 10 <sup>14</sup>
Thermal Conductivity, W/m·K	0.58	0.43
Coefficient of Thermal Expansion, ppm/°C	100	80

Adhesive coverage: a .005-inch bond line will yield approximately 320sq. ft./gallon

#### **INSTRUCTIONS FOR USE:**

- 1. Thoroughly mix equal parts of resin and catalyst by volume.
- 2. Apply mixed product evenly to both surfaces.
- 3. Join the adhesive coated surfaces within 60 minutes of mixing resin and catalyst.
- 4. Cure according to one of the following schedules:

a)	25 °C	24-48 Hours
b)	65 °C	2 Hours
c)	80 °C	1 Hour
d)	95 C	30 Minutes

# **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, and sand blasting. 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.

# STORAGE, HANDLING, & SAFETY:

Store in a cool, dry place in original containers. Keep containers closed and stir well before using. Expected shelf life is 1 year in original containers.

# AVAILABILITY:

10-3216GR is available in the Triggerbond® dual barrel cartridges in 50, 75, 200, and 400 mL. The Translucent and Gray versions are also available in quarts, gallons, 5-gallon pails and 55-gallon drums.

#### **IMPORTANT:**

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