

# 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: 10-3216 TR.

## FEATURES:

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

## Typical Specifications:

	<u>10-3216 Gray</u>	<u>10-3216 TR</u>
Mixed viscosity, 25°C, cps	150,000	27,000
Specific gravity, 25°C,		
Resin	1.32	1.15
Catalyst	1.20	.96
Gel time, 100 grams, 25°C	70 minutes	60 minutes
Tensile shear strength, psi	2,600	2,600
Durometer, shore D	70	65
Dielectric strength, V/mil	410	630
Dielectric constant, 60 Hz	4.4	4.1
Dissipation factor, 60 Hz	.02	.02
Volume resistivity, ohm-cm	$1.1 \times 10^{15}$	$4.0 \times 10^{14}$
Thermal conductivity, btu-in/hr-ft <sup>2</sup> -°F	4.0	3.0
Coefficient of thermal expansion, per °C	$10 \times 10^{-5}$	$80 \times 10^{-6}$

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



**INSTRUCTIONS FOR USE:**

- 1) Surfaces must be clean and grease free. Use an oil free solvent such as acetone to wipe surfaces. Adhesion can be substantially increased by abrading the surfaces to be bonded with emery cloth, sand paper, 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.
- 2) Thoroughly mix equal parts of resin and catalyst by volume.
- 3) Apply mixed product evenly to both surfaces.
- 4) Join the adhesive coated surfaces within 60 minutes of mixing resin and catalyst.
- 5) Cure according to one of the following schedules:

77°F	24-48 hours
150°F	2 hours
180°F	1 hour
200°F	30 minutes

**STORAGE, HANDLING, AND AVAILABILITY:**

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 unopened containers.

10-3216 Gray is available in the Triggerbond® Systems: 50ML, 75ML, 200ML, and 400ML Dual Barrel Cartridges. The Translucent and Gray versions are also available in quarts, gallons, 5-gallon pails and 55-gallon drums.

**IMPORTANT:**

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