

Fast Cure Epoxy Adhesives

10-3005: 5 MINUTE SET EPOXY

10-3020: 20 MINUTE SET EPOXY

10-3046: 46 MINUTE SET EPOXY

DESCRIPTION:

These high bond strength adhesives are clear 100% solids, two component, low viscosity adhesives with a quick setting time of 5-46 minutes at room temperature. They are excellent for bonding plated metals, pewter, glass, wood, ceramic, felt, cement, gem stones, most plastics and rubbers, etc...

These adhesives were tested in our laboratory for flame retardancy properties. According to our test results they meet the requirements of UL94HB.

APPLICATIONS:

These unique adhesives are ideally suited for a wide range of electronic, electrical, industrial, structural, and jewelry applications. These adhesives are also an excellent choice for field repairs. They are offered in the popular TriggerBond® dual barrel cartridge dispensing system and bulk packaging.

FEATURES:

- High bond strength
- Fast room temperature cure – three speeds to choose from
- Water and chemical resistance
- Outstanding thermal shock resistance
- 1:1 mix ratio
- Impact resistance

TYPICAL SPECIFICATIONS (10-3005)

Color	Clear (available in black)
Mix ratio by volume	1:1
Mixed viscosity, 25°C cps *	12,000
Solids content, %	100
Specific gravity, 25°C	1.15
Shore D hardness	
10-3005	86
10-3020	72
10-3046	65
Work Life, 25°C, minutes	
10-3005	3-5
10-3020	10-15
10-3046	25-30
Handling time, 25°C, minutes	
10-3005	15-20
10-3020	30-35
10-3046	55-60
Cure time, 25°C, hours	24-48

Coefficient of thermal expansion (in/in/°C)	60x10 ⁻⁶
Operating temperature range, °C	-50 to +130
Dielectric strength, V/mil	420
Izod Impact, ft-lb/in.	2.7
Dielectric constant, 1KHz at 25°C	4.00
Dissipation factor, 1KHZ at 25°C	.017
Volume resistivity, ohm-cm at 25°C	2.0 x 10 ¹⁴
Shear strength, psi	
Aluminum (etched)	1,500
Cold rolled steel	1,000
Copper	960
Brass	725
Stainless Steel	750
Galvanized Steel	900
ABS	500
PVC	335
Polycarbonate	250
Compression strength, psi	8,500
Coverage, .005 in. thick bond line, sq. ft./gallon	320

* Also available in Non-Sag versions (10-3005NS, 10-3020NS, 10-3046NS).

INSTRUCTIONS FOR USE:

1. Thoroughly mix equal parts of resin to catalyst by weight or volume.
2. Apply evenly to both surface(s) to be bonded.
3. Application to the substrates should be made within five minutes. Larger quantities and/or higher temperatures will reduce the working time. Avoid mixing large quantities and/or at high temperature due to the possibility of creating a high exothermic temperature.
4. Join the coated surfaces. Allow to cure at 60°F (16°C) or higher until adhesive is set. Heat may be added up to 200°F (93°C) to accelerate the cure.
5. Avoid moving parts during cure. Pressure to the substrates is recommended. Maximum shear strength is obtained with a 3-5 mil bond line.

PREPARATION OF SURFACES:

Surfaces to be bonded must be clean and grease free. Adhesion can be substantially increased by abrading the surface with emery cloth, sand paper, etc... A roughened porous surface will produce the best results. Any oxidized metal films should be removed just prior to application of the adhesives.

AVAILABILITY:

Available in the TriggerBond® 50ml, 75ml, 200ml and 400ml dual barrel cartridges. Also packaged in quarts, gallons, and 5 gallon pails.

IMPORTANT:

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