

Fast Cure Thixotropic Epoxy Adhesives

10-3005 NS – 5 MINUTE SET NON-SAG EPOXY

10-3020 NS – 20 MINUTE SET NON-SAG EPOXY

10-3046 NS – 46 MINUTE SET NON-SAG EPOXY

DESCRIPTION:

These high bond strength adhesives are clear 100% solids, two component, non-sag 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:

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

TYPICAL SPECIFICATIONS (10-3005NS)

| | |
|------------------------------|---------------------------------------|
| Color | Semi-transparent (available in black) |
| Mix ratio by volume | 1:1 |
| Mixed viscosity, 25°C cps* | Non-Sag |
| Solids content, % | 100 |
| Specific gravity, 25°C | 1.15 |
| Shore D hardness | |
| 10-3005NS | 86 |
| 10-3020NS | 72 |
| 10-3046NS | 65 |
| Work Life, 25°C, minutes | |
| 10-3005NS | 3-5 |
| 10-3020NS | 10-15 |
| 10-3046NS | 25-30 |
| Handling time, 25°C, minutes | |
| 10-3005NS | 15-20 |
| 10-3020NS | 30-35 |
| 10-3046NS | 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 lower viscosity versions (10-3005, 10-3020, 10-3046).

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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