

10-3009 NC EPOXY ADHESIVE & POTTING COMPOUND

DESCRIPTION:

10-3009 NC is a low viscosity epoxy adhesive and potting compound. It is easy to use and allows the end user to adjust the flexibility of the cured epoxy. This product offers a good combination of peel and tensile strength. 10-3009 NC provides electrical insulation and outstanding adhesion.

FEATURES:

- Non critical mix ratio
- Outstanding thermal shock resistance
- Excellent chemical resistance

TYPICAL SPECIFICATIONS:

Color	Clear
Specific Gravity, 25°C	
Resin	1.17
Catalyst	.96
Viscosity at 25°C; cps	
Resin	800
Catalyst	2,000
Gel time, 100 gram mass, 25°C	25 minutes
Tensile Strength, psi	10,500
Expansion Coefficient, °C	50 x 10 ⁻⁶
Izod Impact, ft-lb/in	4.0
Temperature Range of Use	-50° C to 150° C
Thermal Conductivity, W/m- °K	.43
Thermal Shock, MIL I 16923	Passes
Dielectric Strength V/mil	550
Volume Resistivity, ohm-cm	1.1 x 10 ¹⁵
Dielectric Constant 103 cycles	3.11
Dissipation Factor 103 cycles	0.02
Flexural Strength, psi	51,000



BOND STRENGTH:

Steel to Steel	3,000 psi
Aluminum to Aluminum	3,300 psi
Copper to Copper	1,500 psi
Glass to Glass	**
Nylon to Nylon	1,200 psi
PVC to PVC	750 psi
Natural Rubber to Natural Rubber	**
Brass to Brass	2,600 psi
Natural Rubber to Aluminum	**
Teflon*to Aluminum	1,850 psi

*Teflon Registered Trademark of E.I. DuPont

**Substrate fails before bond failure

MIX RATIO:

10-3009 NC adhesives offer adjustable mix ratios in order to obtain a rigid, semi rigid, or flexible bond line.

RESIN/HARDENER:

- | | |
|---------------------------|---------|
| 1. Rigid formulation | 100/50 |
| 2. Semi rigid formulation | 100/100 |
| 3. Flexible formulation | 100/150 |

For the majority of bonding applications, formulation #2 is used.

CURE SCHEDULE:

1. 24 hours at room temperature
2. 1/2 - 1 hour at 150-160°F
3. 15-30 minutes at 200-220°F

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, 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.

IMPORTANT:

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