

BDRP 4000 Cyanoacrylate Adhesive

1. DESCRIPTION:

BDRP 4000 is a high viscosity, rapid curing, cyanoacrylate adhesive. It is designed to bond a wide variety of similar and dissimilar materials. The handling strength in most applications is in the 15 to 20 seconds time period.

2. CHARACTERISTICS:

Color: Clear
Viscosity: 3970 - 4030 CPS
Specific Color: 1.08
Base: Ethyl

3. Performance Properties:

| Substrate | Fixture Time | Bond Strength |
|-----------|--------------|---------------|
| Steel | <18 seconds | >2,200 PSI |
| Aluminum | <15 seconds | >1,800 PSI |
| Neoprene | < 4 seconds | > 800 PSI |
| ABS | < 8 seconds | > 900 PSI |
| PVC | < 5 seconds | > 900 PSI |
| Lexan | < 25 seconds | > 900 PSI |
| Phenolic | < 10 seconds | > 900 PSI |

Note: ISO4587 is the method used.

4. Electrical Properties:

Dielectric Constant ASTM D150 Dissipation Factor
1 kHz 2.0 to 3.50/< .02

Volume Resistivity ASTM D257: 2 to 10 x 10¹⁵

5. Factors Affecting Cure Speed:

GAP: Thin bond lines result in faster cure speed. The larger bond gaps will lengthen cure speed.
HUMIDITY: Cyanoacrylates cure as a function of water content. Higher humidity will cure products faster. Fixture times are normally measured at 50% relative humidity (RH).

6. Chemical/Solvent Resistance:

| Percent of Strength retained after aging for 500 hours: | |
|---|------|
| Gasoline at 75F | 100% |
| Isopropanol (IPA) at 75F | 100% |
| Ethanol (Denatured Alcohol) at 75F | 100% |
| Freon TA at 75F | 100% |
| Motor Oil at 105F | 100% |
| Lexan (polycarbonate) at 105F & 95% RH | 100% |

7. What Cyanoacrylates Bond:

| | |
|----------------|----------------|
| ABS | NBR |
| Acrylic | Neoprene |
| Aluminum | Nitrile Rubber |
| Bakelite | Nylon |
| Brass | Phenolic |
| Chloroprene | Polycarbonate |
| Chrome | Polyester |
| Copper | Polystyrene |
| EPDM | Porcelain |
| Fiberglass | PVC |
| Latex | SBR |
| Leather | Skin |
| Natural Rubber | Steel |
| Wood | Valox |

8. Directions for use and Storage:

For optimum results, parts should be clean and free from any oils, contamination or loose surfaces (rust). If parts do not mate flush or closely together, you will need to use a product that has higher viscosity to compensate for the gap. Any excess adhesive can be removed with Debonder. Store in unopened containers, out of the direct sunlight, in a dry location, at room temperature (75F). Refrigeration can extend shelf life.

9. ADDITIONAL INFORMATION

NOTE: Information contained herein is based on tests we believe to be reliable and accurate. It is offered in good faith for the benefit of the consumer. The Company shall not be liable for any injury, loss, or damage in the use or handling of its chemical products since conditions and use are beyond our control. In every case, we urge and recommend the user conduct tests to determine to their own satisfaction that the product is of acceptable quality and suitability for their particular purpose under their own operating conditions. Statements concerning possible use of our products are not intended as recommendations to use our products in the infringement of any patent, or for any particular purpose or application. These products are intended for industrial use only.