



TECHNICAL DATA SHEET
TDS #: HP 1000
CYANOACRYLATE ADHESIVE
REVISED: DECEMBER/2010

ADVANCE PERFORMANCE SERIES
HP 1000 CYANOACRYLATE ADHESIVE
BLACK RUBBER TOUGHENED ADHESIVE

DESCRIPTION:

The TS Series is a highly engineered rubber toughened cyanoacrylate adhesive. It is elastomer modified providing excellent impact resistance, thermocycling properties, and heat aging properties. The TS Series is ideal for bonding dissimilar surfaces that are exposed to high and low end temperatures. High end temperature resistance up to 250°F.

PHYSICAL PROPERTIES:

Color: **BLACK**
Viscosity: **1000**
Specific Gravity: **1.10**
Base: **Modified Ethyl**

PERFORMANCE PROPERTIES:

| Substrate | Fixture Time | Bond Strength |
|---------------|--------------|---------------|
| Steel | < 12 Seconds | > 2100 psi |
| Aluminum | < 12 Seconds | > 1750 psi |
| Neoprene | < 5 Seconds | > 750 psi |
| ABS | < 10 Seconds | > 900 psi |
| PVC | < 5 Seconds | > 900 psi |
| Polycarbonate | < 10 Seconds | > 900 psi |
| Phenolic | < 10 Seconds | > 850 psi |

NOTE: Method used, ISO 4587.

Tensile Strength:

Steel: > 1800 psi
NOTE: Method used, ISO 6922

ELECTRICAL PROPERTIES:

Dielectric Constant ASTM D 150 Dissipation Factor
1 kHz 2 to 3.50/ < 0.02

Volume Resistivity ASTM D 257: 2×10^{15} to 10×10^{15}

FACTORS AFFECTING CURE SPEED:

GAP: Thin bond line results in faster cure speed. Larger gaps will lengthen cure speed.

HUMIDITY: Cure and fixture times can be influenced by the humidity conditions at the time of assembly. The higher the RH the faster cure and fixture times will be. Fixture time data based on our testing is conducted at 50% relative humidity.

NON WARRANTY:

Information contained herein is based on test and information we believe to be reliable and accurate. It is offered in good faith for the benefit of the consumer. ASI shall not be liable for any injury, loss, or damage, in the use of its chemical products since the conditions of 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 suitable for their particular purpose under their own operating conditions. Statements concerning the possible use of our products are not intended as recommendations or to use our products in the infringement of any patent. These products are for Industrial Use only.

What we bond:

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

CHEMICAL/SOLVENT RESISTANCE:

| % OF STRENGTH RETAINED AFTER AGING FOR 500 HOURS | |
|--|------|
| GASOLINE @ 22°C: | 100% |
| ISOPROPANOL @ 22°C: | 100% |
| ETHANOL @ 22°C: | 100% |
| FREON TA @ 22°C%: | 100% |
| MOTOR OIL @ 40°C%: | 100% |
| POLYCARBONATE 40°C @ 95% RH | 100% |

DIRECTIONS FOR USE:

For optimum results parts should be clean and free from any contamination on the bonding surface. If parts do not mate flush together use a higher viscosity product to compensate for the gap. Any excess adhesive can be removed using Remove Debonder.

STORAGE:

Store product in unopened containers, out of direct sunlight, in a dry location. Material should be stored at or below 22°C. For extended shelf life unopened containers of the product may be refrigerated.

Engineering Excellence

For technical information and support call 1-800-552-0299 or visit our website at

www.instantca.com