



Permatex® Zip Grip® TE 1000

Description:	A single component medium viscosity, rubber-toughened instant adhesive with exceptional impact resistance.
Intended Use:	Industrial Use: Bond wood, cork, leather, rubber to metal weatherstripping, audio speakers, PCB wire tacking
Features:	Bonds dissimilar substrates Exceptional thermal shock performance High impact resistance Toughened Ethyl Medium Viscosity [Clear] Enhanced toughness to peel and shock loads Humidity and water resistant Permanent Temperature-resistant to 280°F (138°C)
Limitations:	Suitability of product is determined by the end user for their application and process. Not recommended for use on glass due to substrate weakness
Typical Physical Properties:	Technical data should be considered representative or typical only and should not be used for specification purposes.

Cured 7 Days @ 75°F (24°C)

	Typical Values
Adhesive Tensile Shear	3,700 psi (25.5 MPa)
Coefficient of Thermal Expansion (x10-6)	120 in/in.°F (216 cm/cm.°C)
Dielectric Constant	5.4 @ 1KHz
Dielectric Strength	295 volts/mil (11.6 kV/mm) @ 1KHz
Flashpoint	185°F (85°C)
Impact Resistance	8 ft-lb/in2 (17 kJ/m2)
Melting Point	329°F (165°C)
Peel Strength	10 pli (1.75 N/mm)
Refractive Index	1.49
Service Temperature Range	-65° to 280°F (-54 to 138°C)
Solubility	Nitromethane, Acetone
Volume Resistivity	5.3E-14 ohm/cm

Standard Tests

Adhesive Tensile Shear ASTM D 1002
Coef. of Thermal Expansion ASTM D 696
Dielectric Constant ASTM D 150
Volume Resistivity , ohm/cm ASTM D 149
Dielectric Strength, volts/mil ASTM D 149

Uncured Properties @ 72°F (23°C)

Base	Ethyl cyanoacrylate
Color	Colorless liquid
Cure Speed	25-40 sec.(Steel); 25-50 sec.(Plastics); 20-50 sec.
Gap Filling	0.008" (0.2 mm)
Military Specification	MIL-A--46050C Type II Class 3
Shelf Life	1 year
Specific Gravity	8.85 lb/Gal (1.06 g/cm3)
Viscosity	1,000 cP

Surface Preparation:	Clean surface by solvent-wiping any deposits of heavy grease, oil, dirt, or other contaminants. Surface can also be cleaned with industrial cleaning equipment such as vapor phase degreasers or hot aqueous baths. ---- CLEANING METHODS ---- STEEL: Vapor degrease or cold-solvent clean (Sand blasting or other preparation is not typically required). ALUMINUM: Abrade with Scotch-Brite™ abrasive pads or steel wool, then clean with solvent. RUBBER: Wipe clean with isopropyl alcohol or solvent. PLASTICS: Lightly abrade shiny, smooth surfaces, then solvent-wipe with suitable solvent such as 1,1,1-trichloroethane, acetone, or VM&P naphtha. Non-shiny surfaces need only be solvent-wiped.
Mixing Instructions:	Mixing is not applicable to this product.
Application Instructions:	1. Apply adhesive directly from bottle (approximately 0.006 g/in2 (0.93 mg/cm2) is sufficient). 2. Press surfaces together 3. Hold tightly for a few seconds

ADDITIONAL PRODUCT INFORMATION

- Cyanoacrylates generally fixture in a few seconds on most smooth, close-fitting substrates.
- They cure best at room temperature 72°F (22°C)
- Heat does NOT accelerate the cure of Cyanoacrylates
- The gap of the bond line will affect set speed. Smaller gaps tend to increase the speed.
- Activators can be applied to improve set speed but may also impair overall performance

Storage: Store in a cool, dry place.

Compliances: CID A-A-3097, Type II Class 3

Chemical Resistance: Chemical resistance is calculated with a 7 day, room temp. cure (30 days immersion) @ 75°F (24°C)

1,1,1-Trichloroethane	Excellent
Gasoline (Unleaded)	Excellent
Hydrochloric 10%	Poor
Motor Oil	Excellent
Sodium Hydroxide 10%	Poor

Precautions: **FOR INDUSTRIAL USE ONLY:** Please refer to the appropriate Safety Data Sheet prior to using this product.

Warranty: ITW Performance Polymers will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

Order Information:

<u>Item No.</u>	<u>Package Size</u>
72161	1 lb. kit

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