

# Permatex® Zip Grip® GPE 3

**Description:** A low-viscosity, moisture-curing, general purpose instant adhesive for tight-fitting parts

**Intended Use:** Bonding rubber weatherstripping, fixturing rubber gaskets, splicing o-rings, repairing plastics and metals

**Product features:** Fixtures in seconds  
Permanent  
Easy to apply  
Highly resistant to aging and weathering

**Limitations:** 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**

<b>Adhesive Tensile Shear</b>	<b>3,200</b>
<b>Coefficient of Thermal Expansion</b>	<b>0.00012 in./in./°F</b>
<b>Dielectric Constant</b>	<b>5.4 @ 1KHz</b>
<b>Dielectric Strength</b>	<b>11.6 KV/mm</b>
<b>Flashpoint</b>	<b>185°F</b>
<b>Melting Point</b>	<b>&gt;329°F</b>
<b>Peel Strength</b>	<b>2 pli</b>
<b>Refractive Index</b>	<b>1.49</b>
<b>Service Temperature Range</b>	<b>-65° to 200°F</b>
<b>Solubility</b>	<b>Nitromethane, Acetone</b>
<b>Volume Resistivity</b>	<b>5.3E-14 ohm/cm</b>

**TESTS CONDUCTED**

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

**Uncured**

<b>Base</b>	<b>Ethyl cyanoacrylate</b>
<b>Color</b>	<b>Colorless liquid</b>
<b>Cure Speed</b>	<b>5-10 sec. (Steel); 3-5 sec. (Plastics): &lt;2 sec. (</b>
<b>Full Cure</b>	<b>24 hrs</b>
<b>Gap Filling</b>	<b>0.003"</b>
<b>Military Specification</b>	<b>Mil--A-46050C Type II Class 1</b>
<b>Shelf Life</b>	<b>1 year</b>
<b>Specific Gravity</b>	<b>1.06 g/cc</b>
<b>Viscosity</b>	<b>3 cps</b>

**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 .006 grams per sq. in. 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]
- 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 1

**Chemical  
Resistance:**

*Rating chemical resistance is not necessary for this product.*

**Precautions:**

Please refer to the appropriate material safety data sheet (MSDS) prior to using this product.

**For technical assistance, please call 1-800-933-8266**

**FOR INDUSTRIAL USE ONLY**

**Warranty:**

Devcon 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.

**Disclaimer:**

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Devcon makes no representations or warranties of any kind concerning this data.

**Order  
Information:**

70145    2 gm  
70161    1 lb.  
70144    14 gm

**Distributed by:**

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