



Permatex® Zip Grip® GPE 15

Description:	A single component low viscosity, fast setting, cyanoacrylate adhesive
Intended Use:	Industrial Use: Ideal for fast setting bonds for rubber bonding applications
Features:	Easy to apply Fixtures in seconds Permanent Enhanced toughness to peel and shock loads Highly resistant to aging and weathering Rubber Bonder
Limitations:	Suitability of product is determined by the end user for their application and process.

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)

Adhesive Tensile Shear
Coefficient of Thermal Expansion (x10-6)
Dielectric Constant
Dielectric Strength
Flashpoint
Full Cure
Melting Point
Refractive Index
Service Temperature Range
Solubility
Volume Resistivity

Typical Values

3,200 psi (22 MPa)
126 in./in.°F (227 cm/cm.°C)
5.4 @ 1 Kc
294.6 volts/mil (11.6 kV/mm)
185°F (85°C)
24 hours
329°F (165°C)
1.49
-65°F to 200°F (-54°C to 93°C)
Nitromethane, Acetone,
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
Color
Cure Speed
Gap Filling
Military Specification
Shelf Life
Specific Gravity
Viscosity

Ethyl cyanoacrylate
Colorless liquid
5-10 sec. (Steel); 3-5 sec. (Plastics): <2 sec.
0.005 in. (0.13 mm)
Mil-A-46050C Type II Class 1
1 year
8.85 lb/Gal (1.06 g/cm3)
15 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 1
USP VI / ISO 10993

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>
70213	1/3 oz. bottle

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