



Permatex® Zip Grip® GPE 180

Description: A single component medium viscosity, high strength cyanoacrylate adhesive

Intended Use: Intended for high strength rubber bonding applications.

Product features:
Rubber Bonder [high strength]
Easy to apply
Fixtures in seconds
Permanent
Highly resistant to aging and weathering
ISO 10993-5 Certified

Limitations:

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

Adhesive Tensile Shear	3,000 psi
Coefficient of Thermal Expansion	.000126 in./in./ °F
Dielectric Constant	5.4 @ 1 Kc
Dielectric Strength	11.6 KV/mm
Flashpoint	185°F
Full Cure	24 hours
Melting Point	329°F
Refractive Index	1.49
Service Temperature Range	-65° to 200°F
Shelf Life	1 year
Solubility	Nitromethane, Acetone,
Volume Resistivity	5.E-14 ohm/cm

TESTS CONDUCTED

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

Uncured

Base	Ethyl cyanoacrylate
Color	Colorless liquid
Cure Speed	10-25 sec. (Steel): 10-20 sec. (Plastics): <4 se
Gap Filling	0.006"
Military Specification	Mil-A-46050C Type II Class 1
Specific Gravity	1.06 g/cc
Viscosity	180 cps

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 2
ISO 10993-5 Certified

Chemical Resistance:

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

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

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:

70650 1 oz.
70661 1 lb.