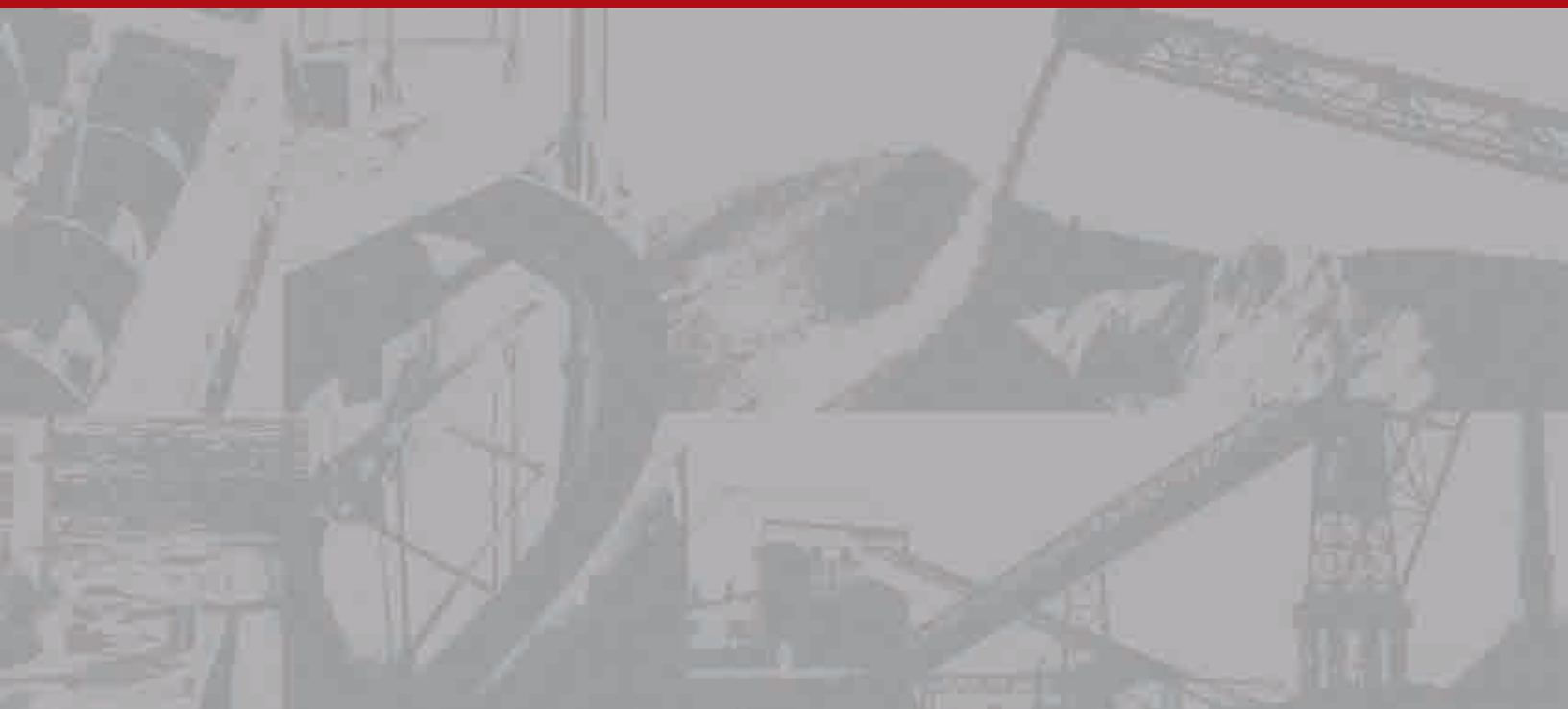


# MRO Products & OEM Adhesives



**Devcon**<sup>®</sup>

***Permatex***<sup>®</sup>

**///TW Devcon**<sup>®</sup>

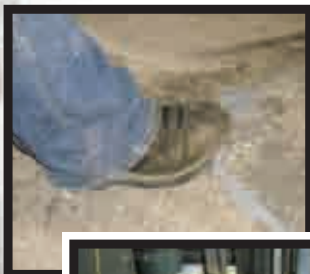
# GOT CRACKS?

## Fix them with **FLOORSAVERS™** **CONCRETE CRACK REPAIR**

This self-leveling  
product fills cracks  
and gaps in concrete –  
**quickl y** and **easil y**.

*Fits in standard caulking gun!*

**NEW!**



**Walking traffic in 30 minutes**



**Forklift traffic in 1 hour**

### ORDER INFORMATION

DESCRIPTION	PART NO.	SIZE
FLOORSAVERS™ Concrete Crack Repair	13400	250 ml cartridge



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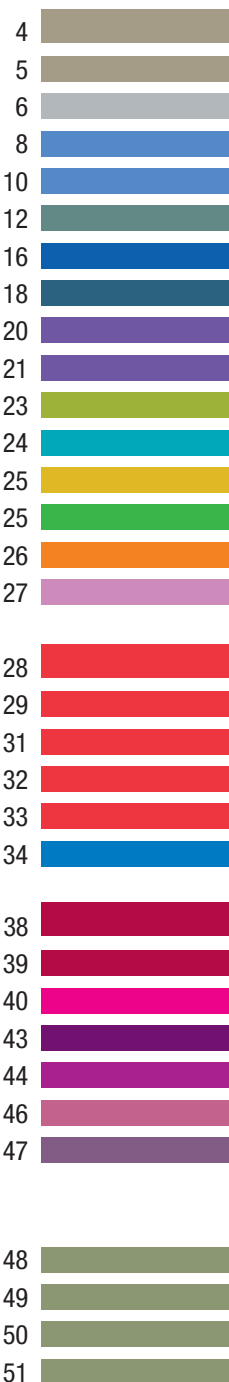
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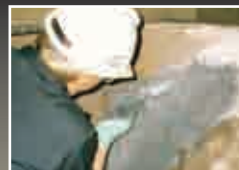


## Products to Extend the Life of Your Processing Equipment

More than 50 years ago, Devcon introduced Plastic Steel®, a tough, steel-filled epoxy putty, as an alternative to welding and brazing. Today, with the addition of several well-known Permatex® product lines, ITW Devcon boasts one of the world's most comprehensive offerings of maintenance and repair products. All these products can be easily applied by plant maintenance personnel with minimal training.

### Devcon® and Permatex® MRO products include:

- ▼ Metal repair epoxies designed to extend the life of critical process equipment
- ▼ Flexane® urethanes for rubber repair
- ▼ Protective coatings that reduce damage from wear and abrasion
- ▼ Floor Savers™ repair systems for repairing, protecting and skid-proofing facility floors
- ▼ Compounds for sealing and removing gaskets
- ▼ Emergency repair products for repairing and returning equipment to service in minutes
- ▼ Anti-seize and specialty lubricants
- ▼ General-purpose and specialty parts cleaners
- ▼ Fast Orange® waterless lotion and pumice hand cleaners



## MRO Product Selector Guide

MRO Applications	Plastic Steel® Putty (A)	Aluminum Putty (F)	Plastic Steel® (B) Aluminum Liquid (F-2)	Titanium Putty	Stainless Steel Putty (ST)	Ceramic Repair Putty/Compound	Brushable Ceramic	Wear Guard™ High-Temp / High Impact	Dfense Blok™ / Dfense Blok™ Fast Cure (FC)	Dfense Blok™ Quick Patch	Magic Bond™ Epoxy Putty	Underwater Repair Putty (UW)
Acid Resistant Coating				▼		▼	▼					
Casting Repair	▼	▼		▼	▼							▼
Chemical Resistant Products / Coatings				▼		▼	▼					
Chocking, Leveling Compound			▼									
Coating (Impact, Abrasion)				▼		▼	▼	▼	▼	▼		
Collection Bins									▼			
Condenser Tube Sheet Coating						▼	▼		▼			
Corrosion Resistant Coating						▼	▼	▼	▼			
Cyclones								▼	▼			
Epoxy (Fast-Cure Repairs)											▼	
Fans / Exhauster Fan Blades						▼		▼	▼			
Flotation Cells							▼		▼			
Holding Fixtures (Making Molds)			▼									
Hoppers (Rebuild & Coat)							▼	▼	▼			
Leaks (Drums, Pipes, Tanks)	▼			▼						▼	▼	▼
Lining Coal Chutes								▼	▼	▼		
Machinable Repair Material	▼	▼	▼	▼	▼							
Meat and Poultry Plants	▼			▼	▼		▼					
Pipe Elbow Coatings / Linings								▼	▼			
Pulverizers / Mills								▼	▼			
Pump Repairs - Slurry				▼		▼			▼			
Pump Repairs - Water				▼		▼	▼					▼
Rebuild Worn Threads / Keyways / Metal	▼		▼	▼								
Repairing Engine Blocks	▼			▼								
Screw Conveyors									▼			
Shaft Repairs				▼								
Tank Linings						▼	▼					▼
Tank Repairs (Holes)	▼			▼							▼	▼
Valve Rebuild / Repairs	▼	▼		▼		▼	▼					
Wet / Damp Surface Bonding											▼	▼





## The Key to Successful Repairs

Proper surface preparation and thorough cleaning are essential for the successful application of Devcon repair products and protective coatings.



### General Surface Preparation

In general, the following steps will help you properly prepare a surface prior to applying Devcon products:

- 1) Make sure the surface is completely dry. Moisture will adversely affect the strength of the bond to the surface.
- 2) Remove all surface contamination (paint, rust and grime) by abrasive blasting, sanding or other mechanical means.
- 3) Degrease with Devcon Cleaner Blend 300.
- 4) Abrade the surface to roughen it and create a surface profile.
- 5) Use the appropriate Devcon primer.

For detailed surface preparation procedures, refer to the appropriate substrate category.



### Metal

To properly prepare a metal surface:

- 1) If the surface is oily or greasy, degrease it with Devcon Cleaner Blend 300.
- 2) Abrasive-blast the surface with 25-40 grit (or coarser) to produce a good surface profile. If you cannot abrasive-blast the surface, use a 60 grit or coarser sandpaper to achieve a similar result.
- 3) Immediately coat the metal surface with Flexane® FL-10 Primer to prevent it from rusting.
- 4) Make repairs as soon as possible after blasting the substrate to avoid oxidation or flash rusting.

### Aluminum Surfaces

Oxidation on aluminum surfaces reduces epoxy adhesion. This oxidation film must be removed before repairing aluminum with Devcon Metal Repair Epoxies.

To properly prepare an aluminum surface:

- 1) Remove oxidation by mechanical means such as grit-blasting or by chemical means such as acid etching.
- 2) Follow the General Surface Preparation guidelines.



### Rubber

To properly prepare a rubber surface:

- 1) Abrade the surface using a rubber rasp or a grinder with a wire wheel to produce a good surface profile. (Oils and contaminants imbedded in the rubber surface are typically released in this process.)
- 2) Remove all oil and grease from the rubber surface with Devcon Cleaner Blend 300 and an abrasive pad.
- 3) Wipe the surface with a clean, lint-free cloth continuously until black residue is no longer picked up by the white cloth.
- 4) Prime the surface as follows:

**Rubber to metal :** Coat all metal surfaces (including stainless steel and aluminum) with two coats of Flexane® FL-10 Primer. The primer will significantly improve adhesion of Devcon products to metal.

**Rubber to metal (for immersion service):** Coat any metal that will be immersed in an aqueous solution with Flexane® FL-10 Primer and Flexane® FL-20 Primer. First apply the FL-10 Primer and let dry for 60 minutes. Next, coat with the FL-20 Primer. Let dry for 30 minutes before applying the Devcon product.

**Rubber to rubber:** Coat all gum rubbers, neoprene or cured urethanes with a thin coat of Flexane® FL-20 Primer. For ultimate peel strength, use FL-40 Primer (on rubber only).

**Rubber to concrete:** Coat concrete with Flexane® FL-20 Primer. Multiple coats may be necessary because concrete is very porous. Let the primer dry for 30 minutes between coats.

**Rubber to wood or fiberglass:** Coat these surfaces with Flexane® FL-20 Primer. Soft woods will require a second coat due to their absorption characteristics.

When bonding rubber to other surfaces, contact Devcon Technical Service for a recommendation on primers and surface preparation procedures.





## Concrete

To properly prepare a concrete surface:

- 1) Degrease the surface with Devcon Cleaner Blend 300 or any water-based emulsifying cleaner and rinse thoroughly. Multiple cleanings may be necessary. Power washers or steam cleaners are very effective and can reduce the number of passes needed to clean the surface. Let the surface dry thoroughly before proceeding.
- 2) Remove any cap-curing agents that were applied to the concrete when it was poured. These agents form a dense, impenetrable finish, making it almost impossible for coatings to adhere to them.
- 3) Shot blast (Blastrac®) the concrete to create a porous surface profile. This will improve surface "wetting" and coating or repair product adhesion.



## Wet Surfaces

In general, Devcon repair products and protective coatings will not adhere to wet surfaces.

To properly repair a wet surface:

- 1) Review the General Surface Preparation guidelines.
- 2) Thoroughly dry the surface. (If you are using Devcon Underwater Repair Putty (UW), refer to Underwater Surfaces section.)
- 3) Stop all leaks or seepage as follows:
  - ▼ Shut off the flow or pressure;
  - ▼ Fit a wooden peg or a sheet metal screw into the hole; or
  - ▼ Stuff wax, cork, plumber's caulk, Mortite or a cloth into the opening.

If the leak is caused by corrosion, the sidewall might be weak. Open the orifice until sound metal is exposed and the wall is thick enough to be plugged.

- 4) Remove surface condensation (sweating) or dampness with a heat gun or similar device.



## Underwater Surfaces

To properly prepare an underwater surface:

- 1) Remove all dirt, barnacles, flaking paint or algae/seaweed from the surface.
- 2) Wipe the surface with a clean cloth to remove any film. Although you cannot degrease underwater, wiping and turning a clean cloth will often remove any film from the surface.
- 3) Abrade the surface if possible. (Use a file or other mechanical means.)
- 4) Remove oxidation by mechanical means such as high-pressure water or grit-blasting, or by chemical means such as acid etching.

## Devcon Technical Service:

If you have questions, please contact Devcon Technical Service:

**1-800-933-8266**

Blastrac® is a registered trademark of Blastrac, NA.



## Devcon Metal Repair Putties

Metal-filled epoxy putties allow fast, economical, permanent repairs to plant and equipment; cure quickly; and resist corrosion and harsh chemicals.



### Devcon® Plastic Steel® Putty (A)

The original metal-filled epoxy putty, it is ideal for repairing areas where welding or brazing would be impractical. Can be drilled, tapped and machined. Conforms to the requirements of MIL-PRF-24176C, Type I.



Item #	Container Size
10110	1 lb
10120	4 lb
10130	25 lb

### Devcon® Plastic Steel® 5 Minute® Putty (SF)

Fast-curing, steel-filled epoxy for emergency repairs at temperatures as low as 40°F. Repaired parts can be returned to service within one hour.



Item #	Container Size
10240	1 lb

### Devcon® Aluminum Putty (F)

Aluminum-filled epoxy putty for dependable nonrusting repairs to aluminum castings, machinery and equipment. Widely used in HVAC applications, it conforms to requirements of MIL-PRF-24176C, Type II.



Item #	Container Size
10610	1 lb
10620	3 lb

### Devcon® Titanium Putty

High-performance, nonrusting titanium-reinforced epoxy putty for making repairs that can be precision machined. Withstands heavy loads in harsh chemical environments. Conforms to the requirements of MIL-PRF-24176C, Type I.



Item #	Container Size
10760	1 lb
10770	2 lb

### Devcon® Stainless Steel Putty (ST)

Stainless steel-filled epoxy putty for patching, repairing and rebuilding stainless steel surfaces as well as food processing equipment.



Item #	Container Size
10270	1 lb



### Devcon® Bronze Putty (BR)

Bronze-filled epoxy putty for repairing bronze and brass bushings, castings and parts.



Item #	Container Size
10260	1 lb

### Devcon® Ceramic Repair Putty

Trowelable, alumina-filled epoxy compound for rebuilding, smoothing and protecting processing equipment exposed to corrosion, erosion, cavitation, chemicals and acids. Conforms to the requirements of MIL-PRF-24176C, Type I.



Item #	Container Size
11700	3 lb

### Devcon® Ceramic Repair Compound

Trowelable, alumina-filled epoxy compound with a 45-minute pot life and larger kit size for bigger jobs of rebuilding, smoothing and protecting processing equipment.

Item #	Container Size
11730	32 lb

### Devcon® Wear Resistant Putty (WR-2)

Smooth, nonrusting, all-purpose epoxy compound for repairs requiring smooth, high-slip finishes (such as lathe beds).

Item #	Container Size
11410	1 lb
11420	3 lb

### Devcon® HVAC Repair (Special F)

Aluminum-filled epoxy for repairing worn or fatigued metals. Ideal for repairing copper compressor coils.

Item #	Container Size
19770	6.5 oz

### Devcon® FasMetal™

High-performance, alumina-filled epoxy for making quick, permanent emergency repairs to pipes, chutes, tanks and bearing housings.

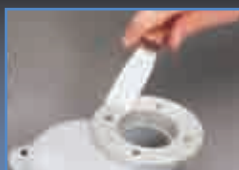
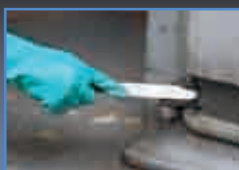


Item #	Container Size
10780	.75 lb

Approved by  
American Bureau of Shipping



Canadian part numbers are the same as US part numbers.

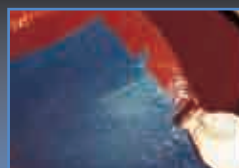




Physical Properties	Plastic Steel® Putty (A)	Plastic Steel® 5 Minute® Putty (SF)	Aluminum Putty (F)	Stainless Steel Putty (ST)	Bronze Putty (BR)	Titanium Putty	Ceramic Repair Putty	Ceramic Repair Compound	Wear Resistant Putty (WR-2)	HVAC Repair (Special F)	FasMetal™
<b>Color</b>	Dark Grey	Dark Grey	Aluminum	Grey	Bronze	Grey	Dark Blue	Dark Blue	Dark Grey	Grey	Grey
<b>Mix ratio by weight / volume</b> <small>resin:hardener</small>	9:1 / 2.5:1	1.7:1 / 1:1	9:1 / 4:1	11:1 / 3.75:1	9:1 / 3:1	4.3:1 / 3:1	7:1 / 4.3:1	4.7:1 / 3.3:1	9:1 / 4:1	0.9:1 / 1:1	1.07:1 / 1:1
<b>Mixed viscosity</b> <small>cP</small>	Putty	Putty	Putty	Putty	Putty	Putty	Putty	Putty	Putty	40,000	Putty
<b>Functional cure</b> <small>hours</small>	16	1	16	16	16	16	16	16	16	16	1
<b>Pot life</b> <small>minutes @ 75°F</small>	45	5	60	58	35	21	25	45	45	60	4
<b>Specific volume</b> <small>inches³/pound</small>	11.9	12.2	17.5	12.4	12.4	11.7	16.4	17.9	13.9	16.1	17.2
<b>Coverage per pound</b> <small>inches² @ 1/4" thickness</small>	48	49	70	50	50	47	66	72	56	64	69
<b>Cured hardness (ASTM D2240)</b> <small>Shore D</small>	85	85	85	85	85	87	90	86	85	85	90
<b>Cured shrinkage (ASTM D2566)</b> <small>inch/inch</small>	0.0006	0.0006	0.0008	0.0010	0.0010	0.0010	0.0022	0.0024	0.0005	0.0008	0.0093
<b>Adhesive tensile shear (ASTM D1002)</b> <small>psi</small>	2,800	2,026	2,600	2,385	2,680	2,000	2,000	2,231	2,200	2,500	2,000
<b>Compressive strength (ASTM D695)</b> <small>psi</small>	8,260	10,400	8,420	8,400	8,540	15,200	12,700	10,240	9,800	8,420	12,700
<b>Flexural strength (ASTM D790)</b> <small>psi</small>	5,600	7,680	6,760	5,280	6,180	7,700	6,475	5,870	6,500	6,260	7,700
<b>Modulus of elasticity (ASTM D638)</b> <small>psi x 10³</small>	8.5	7.5	8.0	8.0	8.0	9.5	9.0	8.1	7.5	7.8	8.5
<b>Coefficient of thermal expansion (ASTM D696)</b> <small>[(in)/(in x °F)] x 10⁻⁶</small>	48	34	29	34	33	22	17	20	32	29	32
<b>Thermal conductivity (ASTM C177)</b> <small>[(cal x cm)/(sec x cm² x °C)] x 10⁻³</small>	1.37	2.65	1.73	1.23	1.57	1.95	1.88	1.72	1.67	1.73	2.04
<b>Dielectric constant (ASTM D150)</b> <small>1 kHz</small>	67.5	35.0	21.4	75.0	75.0	44.8	41.0	38.0	6.3	21.4	18.6
<b>Dielectric strength (ASTM D149)</b> <small>volts/mil</small>	30	30	100	30	25	56	370	350	400	100	370
<b>Maximum continuous dry service temperature</b> <small>°F</small>	250	200	250	250	250	350	350	350	250	250	250

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance											
<b>ACIDS</b>											
Acetic 10%	○	○	○	○	○	○	○	○	○	○	○
Hydrochloric 10%	●	○	●	●	●	●	●	●	●	○	○
Sulfuric 10%	●	○	●	●	●	●	●	●	●	○	○
<b>ALCOHOLS</b>											
Methanol	○	○	○	○	○	●	●	●	○	○	○
Isopropanol	○	○	○	○	○	●	●	●	○	○	○
<b>KETONES</b>											
Acetone	○	○	○	○	○	○	○	○	○	○	○
Methyl ethyl ketone	○	○	○	○	○	○	○	○	○	○	○
<b>ALKALIS</b>											
Ammonium hydroxide 20%	○	○	○	○	○	●	●	●	○	○	○
Sodium hydroxide 10%	○	○	○	○	○	●	●	●	○	○	○
<b>HYDROCARBONS</b>											
Gasoline (unleaded)	○	○	○	○	○	●	●	●	○	○	○
Mineral spirits	○	○	○	○	○	●	●	●	○	○	○
<b>CHLORINATED HYDROCARBONS</b>											
1-1-1 Trichloroethane	○	○	○	○	○	●	●	●	○	○	○
<b>SALTS</b>											
Sodium chloride	○	○	○	○	○	●	●	●	○	○	○
Trisodium phosphate	○	○	○	○	○	●	●	●	○	○	○



## Liquids and Metal Casting Compounds

Pourable epoxy compounds provide accurate detail reproduction and are ideal for making molds, patterns, holding fixtures and forming dies.

### Devcon® Plastic Steel® Liquid (B)

A pourable steel-filled epoxy that provides accurate detail reproduction in making holding fixtures, light gauge forming dies and molds. Can be drilled, tapped and machined. Qualifies under Federal Specification MMM-A-1754, Adhesive/Sealing.



Item #	Container Size
10210	1 lb
10220	4 lb
10230	25 lb

### Devcon® Aluminum Liquid (F-2)

Aluminum-filled pourable epoxy for making molds, patterns and holding fixtures. It can be drilled, tapped and machined and qualifies under Federal Specification MMM-A-1754, Adhesive/Sealing.



Item #	Container Size
10710	1 lb
10720	3 lb

### Devcon® Liquid Release Agent

Silicone release agent prevents Devcon's epoxy and urethane compounds from sticking to patterns or mold surfaces.



Item #	Container Size
19600	1 pt

### Devcon® Cleaner Blend 300

Safe, multi-purpose, nontrichloroethane based degreaser for removing heavy grease and oil from metal surfaces. Excellent general-purpose degreaser.

Item #	Container Size
19510	1 pt

### Devcon® Brushable Ceramic

When applied in a 15-20 mil coating, this low-viscosity, alumina-filled, brushable epoxy compound produces a smooth, protective barrier against wear, abrasion, corrosion, erosion and chemical attack. Devcon® Brushable Ceramic White is NSF 61 Certified.



Item #	Container Size
11760	2 lb (red)
11762	12 lb (red)
11765	2 lb (blue)
11767	12 lb (blue)
11768	55 lb (blue)
11770	2 lb (white)

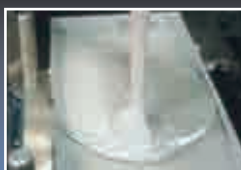
Approved by  
American Bureau of Shipping



For Technical Information or information on where to buy Devcon® and Permatex® products, call 1-800-933-8266 or visit [www.devcon.com](http://www.devcon.com)



🇨🇦 Canadian part numbers are the same as US part numbers.

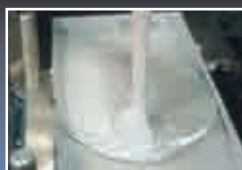


Physical Properties	Plastic Steel® Liquid (B)	Aluminum Liquid (F-2)	Brushable Ceramic	
<b>Color</b>	Dark Grey	Aluminum	Red, Blue	White
<b>Mix ratio by weight / volume</b> <i>resin:hardener</i>	9:1 / 3:1	9:1 / 5:1	5.6:1 / 3.4:1	8.5:1 / 5.6:1
<b>Mixed viscosity</b> <i>cP</i>	15 / 25,000	15 / 25,000	32,000	40,000
<b>Functional cure</b> <i>hours</i>	16	16	16	16
<b>Pot life</b> <i>minutes @ 75°F</i>	45	75	40	21
<b>Specific volume</b> <i>inches<sup>3</sup>/pound</i>	13.1	17.5	17.5	16.5
<b>Coverage per pound</b> <i>inches<sup>2</sup> @ 1/4" thickness</i>	52	70	7.6 <sup>1</sup>	7.6 <sup>1</sup>
<b>Cured hardness</b> <b>(ASTM D2240)</b> <i>Shore D</i>	85	85	90	87
<b>Cured shrinkage</b> <b>(ASTM D2566)</b> <i>inch/inch</i>	0.0006	0.0009	0.0020	0.0020
<b>Adhesive tensile shear</b> <b>(ASTM D1002)</b> <i>psi</i>	2,800	2,700	2,000	2,000
<b>Tensile strength</b> <b>(ASTM D638)</b> <i>psi</i>	4,900	5,000	3,800	3,800
<b>Compressive strength</b> <b>(ASTM D695)</b> <i>psi</i>	10,200	9,820	15,200	15,200
<b>Flexural strength</b> <b>(ASTM D790)</b> <i>psi</i>	7,480	7,180	8,000	8,000
<b>Modulus of elasticity</b> <b>(ASTM D638)</b> <i>psi x 10<sup>3</sup></i>	8.5	7.5	9.0	9.0
<b>Coefficient of thermal expansion</b> <b>(ASTM D696)</b> <i>[(in)/(in x °F)] x 10<sup>-6</sup></i>	38	50	19	19
<b>Thermal conductivity</b> <b>(ASTM C177)</b> <i>[(cal x cm)/(sec x cm<sup>2</sup> x °C)] x 10<sup>-3</sup></i>	1.39	1.58	1.92	1.92
<b>Dielectric constant</b> <b>(ASTM D150)</b> <i>1 kHz</i>	67.5	8.6	38.7	38.7
<b>Dielectric strength</b> <b>(ASTM D149)</b> <i>volts/mil</i>	30	100	382	382
<b>Maximum continuous dry service temperature</b> <i>°F</i>	250	250	350	350

NOTES: <sup>1</sup> Coverage (feet<sup>2</sup> @ 15 mils)

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance				
<b>ACIDS</b>				
Acetic 10%	○	○	○	○
Hydrochloric 10%	●	●	●	●
Sulfuric 10%	●	●	●	●
<b>ALCOHOLS</b>				
Methanol	○	○	●	●
Isopropanol	○	○	●	●
<b>KETONES</b>				
Acetone	○	○	○	○
Methyl ethyl ketone	○	○	○	○
<b>ALKALIS</b>				
Ammonium hydroxide 20%	●	○	●	●
Sodium hydroxide 10%	●	○	●	●
<b>HYDROCARBONS</b>				
Gasoline (unleaded)	●	●	●	●
Mineral spirits	●	●	●	●
<b>CHLORINATED HYDROCARBONS</b>				
1-1-1 Trichloroethane	●	●	●	●
<b>SALTS</b>				
Sodium chloride	●	●	●	●
Trisodium phosphate	●	●	●	●



## DFense Blok™

DFense Blok™ is a new, innovative line of specially formulated wear and abrasion products designed to outperform and outlast traditional wear and abrasion epoxies, while also providing superior performance in the most severe conditions.

### Devcon® DFense Blok™

A revolutionary epoxy compound formulated to significantly outlast traditional wear and abrasion products while providing superior protection in the most severe conditions.

Item #	Container Size
11330	30 lb

### Devcon® DFense Blok™ Surface Wetting Agent

A thixotropic epoxy gel system that improves the ease of application and cured adhesion properties of DFense Blok™.

Item #	Container Size
11340	1 lb

### Devcon® DFense Blok™ Fast Cure (FC)

Alumina ceramic bead-filled epoxy system with outstanding wear and abrasion resistance for severe service conditions. Fast cure allows repaired processing equipment to be returned to service in as little as 2 hours.

Item #	Container Size
11350	9 lb

### Devcon® DFense Blok™ Quick Patch

Alumina ceramic bead-filled epoxy system with a very fast cure speed for emergency patching of processing equipment. Provides wear and abrasion resistance for extended service life.

Item #	Container Size
11320	1 lb

**NEW!**

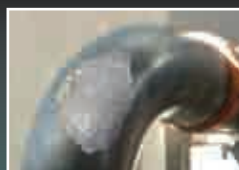
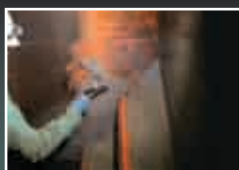
**DFENSE  
BLOK™**



**Watch our  
Impact Test!**



🇨🇦 Canadian part numbers are the same as US part numbers.





Physical Properties	DFense Blok™ with Surface Wetting Agent (SWA)	DFense Blok™ Fast Cure (FC)	DFense Blok™ Quick Patch
Pot life minutes @ 75°F	25	15	4
Functional Cure	4-5 hours	2-3 hours	30 minutes
Coverage per pound inches² @ 1/4" thickness	47	53	60
Adhesive tensile shear (ASTM D1002) psi	2,616	2,764	2,495
Lap Shear Adhesion psi	882	886	656
T-Peel Adhesion psi	44	30	22
Side Impact Adhesion psi	>113	80	29
Grit Blast Volume Loss cc	0.25	0.36	0.51
Sliding Abrasion Volume Loss cc	0.8	0.8	2.0
Drop Impact Strength in	81	60	24

Key: ● Excellent ● Very Good ○ Fair ⊘ Poor

Chemical Resistance			
<b>ACIDS</b>			
Acetic 10%	⊘	⊘	⊘
Hydrochloric 10%	●	●	●
Sulfuric 10%	●	●	●
<b>ALCOHOLS</b>			
Methanol	⊘	⊘	○
Isopropanol	○	⊘	○
<b>KETONES</b>			
Acetone	○	⊘	○
Methyl ethyl ketone	⊘	⊘	○
<b>ALKALIS</b>			
Ammonium hydroxide 20%	●	●	●
Sodium hydroxide 10%	●	●	●
<b>HYDROCARBONS</b>			
Gasoline (unleaded)	○	●	●
Mineral spirits	●	●	●
<b>CHLORINATED HYDROCARBONS</b>			
1-1-1 Trichloroethane	●	●	●
<b>SALTS</b>			
Sodium chloride	●	●	●
Trisodium phosphate	●	●	●



## Trowelable and Brushable Wearing Compounds

Nonsagging, alumina bead-filled coatings that protect dry materials handling and storage equipment from abrasion, corrosion and wear.

### Devcon® Wear Guard™ High Load

Alumina ceramic bead-filled epoxy system with outstanding abrasion resistance for severe service conditions with particulate greater than 1/8".

Item #	Container Size
11490	30 lb

### Devcon® Wear Guard™ High Temp

High-density, ceramic bead-filled epoxy system for maximum wear and abrasion resistance in high-temperature applications.

Item #	Container Size
11480	30 lb

### Devcon® Wear Guard™ High Impact

High-density, micro-alumina ceramic bead-filled epoxy system with flexible polymers for superior adhesion and protection against extreme impact and flexing.

Item #	Container Size
11460	30 lb

### Devcon® Wear Guard™ Fine Load

High-density, micro-alumina ceramic bead-filled epoxy system for protecting equipment that handles particulate smaller than 1/8".

Item #	Container Size
11470	30 lb

### Devcon® Wear Guard™ Ultra

Alumina ceramic bead-filled epoxy system with outstanding abrasion resistance for severe conditions. Ideal for environments experiencing extreme wear.

Item #	Container Size
11475	30 lb

### Devcon® Combo Wear FC (Fast Cure)

High-tech, three-component compound for quickly repairing processing equipment and returning it to service in as little as 1 1/2 hours.

Item #	Container Size
11450	9 lb

### Devcon® Brushable Ceramic



When applied in a 15-20 mil coating, this low-viscosity, alumina-filled, brushable epoxy compound produces a smooth, protective barrier against wear, abrasion, corrosion, erosion and chemical attack. Devcon® Brushable Ceramic White is NSF 61 Certified. (See page 11 for Brushable Ceramic physical properties.)

Item #	Container Size
11760	2 lb (red)
11762	12 lb (red)
11765	2 lb (blue)
11767	12 lb (blue)
11768	55 lb (blue)
11770	2 lb (white)

### Devcon® Carbide Putty

Silicone carbide-filled epoxy putty for economical protection against sliding wear and abrasion. Ideal for mining applications.

Item #	Container Size
10050	3 lb
10080	20 lb

### Devcon® High-Performance Backing Compound

High-strength epoxy liquid for use in rod, ball, pebble and autogenous mills, as well as in cone and gyratory crushers.

Item #	Container Size
11170	20 lb

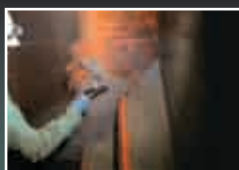
### Devcon® Tile Adhesive

High-strength, trowelable adhesive that cures at room temperature.

Item #	Container Size
11495	20 lb



🇨🇦 Canadian part numbers are the same as US part numbers.

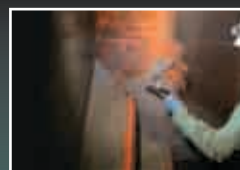


Physical Properties <sup>1</sup>	DFense Blok™	Wear Guard™ High Load	Wear Guard™ High Temp	Wear Guard™ High Impact	Wear Guard™ Fine Load	Wear Guard™ Ultra	Combo Wear FC (Fast Cure)	High Performance Backing Compound	Tile Adhesive	Carbide Putty
<b>Color</b>	Grey	Grey	Grey	Dark Grey	Grey	Grey	Grey	Red	Light Grey	Grey
<b>Mix ratio by weight / volume</b> <i>resin:hardener</i>	2:1 / 100:45	2:1 / 2:1	13.7:1 / 6:1	2.5:1 / 2.5:1	2:1 / 2:1	2.15:1.5.65 <sup>2</sup>	2:1 / 2:1	100:5.94 / 9.9:1	1.1:1 / 1:1	8:1 / 4:1
<b>Mixed viscosity</b> <i>cP</i>	Putty	Putty	Putty	Putty	Putty	Putty	Putty	10,320	Putty	Putty
<b>Functional cure</b> <i>hours</i>	4-5	6-8	Heat Cured	6-8	6-8	16	2-3	8	12	16
<b>Pot life</b> <i>minutes @ 75°F</i>	25	30	120	30	30	20	7	56	240	50
<b>Specific volume</b> <i>inches<sup>3</sup>/pound</i>	12.6	12.9	14.3	12.4	12.4	11.4	12.4	17.2	19.2	15.9
<b>Coverage per pound</b> <i>inches<sup>2</sup> @ 1/4" thickness</i>	47	50	60	50	50	44	50	349 <sup>3</sup>	76.8	64
<b>Cured hardness</b> <b>(ASTM D2240)</b> <i>Shore D</i>	77	87	87	85	87	87	87	85	81	85
<b>Cured shrinkage</b> <b>(ASTM D2566)</b> <i>inch/inch</i>	0.0005	0.0006	0.0010	0.0006	0.0006	0.0004	0.0008	0.0006	0.0010	0.0009
<b>Adhesive tensile shear</b> <b>(ASTM D1002)</b> <i>psi</i>	2,616	1,474	2,300	2,567	1,375	1,425	1,450	5,300	2,890	1,350
<b>Compressive strength</b> <b>(ASTM D695)</b> <i>psi</i>	7,145	11,000	13,200	7,250	11,000	13,910	11,000	18,850	9,620	8,160
<b>Flexural strength</b> <b>(ASTM D790)</b> <i>psi</i>	7,876	7,140	8,220	6,144	7,190	7,220	7,140	11,500	5,480	5,480
<b>Coefficient of thermal expansion</b> <b>(ASTM D696)</b> <i>[(in)/(in x °F)] x 10<sup>-6</sup></i>	29	32	27	34	34	26	34	22	14	14
<b>Dielectric constant</b> <b>(ASTM D150)</b> <i>1 kHz</i>	49.0	41.0	38.0	46.0	46.0	40.0	41.0	N / A	46.0	25.0
<b>Maximum continuous dry service temperature</b> <i>°F</i>	300	300	450	300	300	300	300	250	200	250

NOTES: <sup>1</sup> See page 11 for Brushable Ceramic physical properties <sup>2</sup> Three-part system, beads separate <sup>3</sup> Coverage in inches<sup>2</sup> / 20.4 pound unit

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance										
<b>ACIDS</b>										
Acetic 10%	○	○	○	○	○	○	○	○	○	○
Hydrochloric 10%	●	●	●	●	●	●	○	●	●	○
Sulfuric 10%	●	●	●	●	●	●	●	○	●	○
<b>ALCOHOLS</b>										
Methanol	○	○	○	○	○	○	○	○	○	○
Isopropanol	○	○	○	○	○	○	○	○	○	○
<b>KETONES</b>										
Acetone	○	○	○	○	○	○	○	○	○	○
Methyl ethyl ketone	○	○	○	○	○	○	●	○	●	○
<b>ALKALIS</b>										
Ammonium hydroxide 20%	●	●	●	●	●	●	●	●	●	●
Sodium hydroxide 10%	●	●	●	●	●	●	●	●	●	●
<b>HYDROCARBONS</b>										
Gasoline (unleaded)	○	●	●	●	●	●	○	●	○	●
Mineral spirits	●	●	●	●	●	●	●	●	●	●
<b>CHLORINATED HYDROCARBONS</b>										
1-1-1 Trichloroethane	●	●	●	●	●	●	●	○	●	●
<b>SALTS</b>										
Sodium chloride	●	●	●	●	●	●	●	●	●	●
Trisodium phosphate	●	●	●	●	●	●	●	●	●	●



## Urethane Casting Compounds

Castable, nonshrinking liquid urethanes for producing flexible molds, holding fixtures and linings as well as low-volume or discontinued parts.

### Devcon® Flexane® 80 Liquid

Medium-viscosity (10,000 cP) urethane fills voids completely and faithfully reproduces mold detail. Cures to semi-rigid rubber (Shore A 87).

Item #	Container Size
15800	1 lb
15810	10 lb

### Devcon® Flexane® 94 Liquid

Low-viscosity (6,000 cP) urethane fills voids completely and faithfully reproduces mold detail. Similar to Flexane® 80 Liquid, but cures to a rigid rubber (Shore A 97).

Item #	Container Size
15250	1 lb
15260	10 lb

### Devcon® Edge & Seal (T-35)

Liquid urethane for edging fabric felt belting used in the papermaking industry as well as potting and encapsulating.

Item #	Container Size	Dispenser	Nozzle
DF039	400 ml cartridge	15043 (manual)	15047

### Devcon® Flex-Add™

Used with Flexane® 80 Liquid to produce a more flexible urethane.

Item #	Container Size
15940	8 oz

### Devcon® Flexane® Accelerator

Shortens the cure time of Flexane® products even in temperatures as low as 32°F (0°C).

Item #	Container Size
15990	12 oz

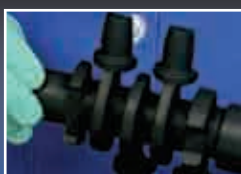
### Devcon® Liquid Release Agent

Silicone release agent produces high-gloss finish, prevents sticking of and damage to Flexane® parts during demolding.

Item #	Container Size
19600	1 pt



Canadian part numbers are the same as US part numbers.



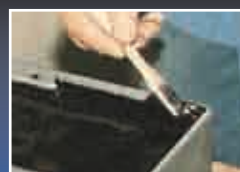


Physical Properties	Flexane® 80 Liquid	Flexane® 94 Liquid	Edge & Seal (1-35)
Color	Black	Black	Black
Mix ratio by weight <small>resin: hardener</small>	77:23	69:31	80:20
Mixed viscosity <small>cP</small>	10,000	6,000	5,000
Pot life <small>minutes @ 75°F</small>	30	10	3
Specific volume <small>inches<sup>3</sup>/pound</small>	26.5	26.5	26.5
Coverage per pound <small>inches<sup>2</sup> @ 1/4" thickness</small>	106	106	106
Functional cure <small>hours</small>	16	16	1.5
Demolding time <small>hours</small>	10	5	N / A
Cured hardness (ASTM D2240) <small>Shore A</small>	87	97	94
Cured shrinkage (ASTM D2566) <small>inch/inch</small>	0.0018	0.0014	0.0014
Tensile strength (ASTM D412) <small>psi</small>	2,100	2,800	3,300
Tear resistance (ASTM D624) <small>pli</small>	350	415	430
Abrasion resistance <small>weight loss<sup>1</sup></small>	285	330	250
Maximum elongation (ASTM D412) <small>%</small>	650	500	450
Dielectric strength (ASTM D149) <small>volts/mil</small>	350	350	350
Maximum continuous service temperature <small>°F wet</small>	120	120	120
Maximum continuous service temperature <small>°F dry</small>	180	180	180

NOTES: <sup>1</sup> Taber H-18 wheel (mg / 1,000 revolutions @ 1,000 gram load)

Key: ● Excellent ● Very Good ○ Fair ⊖ Poor

Chemical Resistance			
<b>ACIDS</b>			
Acetic 10%	⊖	⊖	○
Hydrochloric 10%	●	●	○
Sulfuric 10%	●	●	○
Sulfuric 50%	●	●	●
Phosphoric 10%	●	●	○
<b>ALCOHOLS</b>			
Methanol	⊖	⊖	⊖
Isopropanol	⊖	⊖	⊖
<b>KETONES</b>			
Acetone	⊖	⊖	⊖
Methyl ethyl ketone	⊖	⊖	⊖
<b>ALKALIS</b>			
Ammonium hydroxide 20%	●	●	●
Sodium hydroxide 10%	●	●	●
<b>HYDROCARBONS</b>			
Gasoline (unleaded)	⊖	⊖	⊖
Mineral spirits	⊖	⊖	⊖
<b>SALTS</b>			
Sodium chloride	●	●	●
Trisodium phosphate	●	●	●
Aluminum sulfate 10%	●	●	●
Sodium carbonate 10%	●	●	●



## Urethane Repair Compounds

Flexible urethane compounds for repairing worn or damaged belting and rubber surfaces subject to wear, impact, abrasion, vibration or expansion.

### Devcon® Flexane® 80 Putty

Trowelable urethane for repairing and lining process equipment exposed to wear, abrasion, vibration or expansion/contraction.

Item #	Container Size
15820	1 lb
15850	4 lb

### Devcon® Flexane® High Performance Putty

Trowelable lining for maximum protection against abrasion, gouging and impact.

Item #	Container Size
15330	1 lb

### Devcon® Flexane® Fast Cure Putty

Black Flexane® Fast Cure thickens to a putty in seconds providing superior flexibility, elongation and adhesion to rubber. Ideal for belt repairs.

Item #	Container Size	Dispenser	Nozzle
15049	400 ml cartridge	15043 (manual)	15047

### Devcon® Flexane® Fast Cure Liquid

Grey Flexane® Fast Cure Liquid is a convenient, time-saving method of filling expansion joints and repairing rubber.

Item #	Container Size	Dispenser	Nozzle
15050	400 ml cartridge	15043 (manual)	15047

### Devcon® Flexane® Brushable

High-performance brushable urethane for protection against abrasion and impact. Excellent for repairing/ coating rubber-lined pumps, tanks and valves.

Item #	Container Size
15350	1 lb

### Devcon® Flexane® Belt Repair Kit

An ideal solution for making fast, permanent emergency repairs to damaged conveyor belts, rubber rollers or other rubber parts.

Item #	Container Size
15165	Kit

### Devcon® Cable Cast FR

Flame-retardant urethane for encapsulating/insulating cable jackets; provides superior environmental protection. MSHA approved for the mining industry.

Item #	Container Size	Dispenser	Nozzle
15051	400 ml cartridge	14410 (manual)	14293

### Devcon® Flexane® Primers

Required for maximum adhesion of Flexane® products.

FL-10 Primer for all metals.

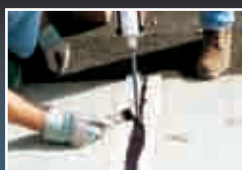
FL-20 Primer for rubber, wood, fiberglass and concrete.

FL-40 Primer for rubber. Ensures ultimate peel strength (greater than 80 psi).

Item #	Primer	Container Size
15980	FL-10	4 oz
15985	FL-20	4 oz
15984	FL-40	4 oz



🇨🇦 Canadian part numbers are the same as US part numbers.



Physical Properties	Flexane® 80 Putty	Flexane® High Performance Putty	Flexane® Fast Cure Putty	Flexane® Fast Cure Liquid	Flexane® Brushable	Cable Cast FR	Flexane® Belt Repair Kit
Color	Black	Black	Black	Grey	Black	Black	Black
Mix ratio by weight <small>resin: hardener</small>	72:28	94:6	80:20	80:20	80:20	63:37	72:28
Mixed viscosity <small>cP</small>	Putty	Putty	Putty	5,800	40,000	10,000	Putty
Pot life <small>minutes @ 75°F</small>	20	10	8	8	45	10	20
Specific volume <small>inches<sup>3</sup>/pound</small>	23.5	23.5	23.5	26.5	26.0	22.6	23.5
Coverage per pound <small>inches<sup>3</sup> @ 1/4" thickness</small>	94	94	94	106	104	90	94
Functional cure <small>hours</small>	12	16	3	2	18	12	12
Demolding time <small>hours</small>	N / A	N / A	N / A	N / A	N / A	N / A	N / A
Cured hardness (ASTM D2240) <small>Shore A</small>	87	78	88	94	86	83	87
Cured shrinkage (ASTM D2566) <small>inch/inch</small>	0.0014	0.12 <sup>2</sup>	0.0014	0.0018	0.23 <sup>2</sup>	0.0014	0.0014
Tensile strength (ASTM D412) <small>psi</small>	1,700	4,500	2,400	3,300	3,500	2,600	1,700
Tear resistance (ASTM D624) <small>pli</small>	300	400	275	430	400	325	300
Abrasion resistance <small>weight loss<sup>1</sup></small>	280	140	220	330	90	N / A	280
Maximum elongation (ASTM D412) <small>%</small>	300	600	500	450	600	800	300
Dielectric strength (ASTM D149) <small>volts/mil</small>	350	350	350	350	340	300	350
Maximum continuous wet service temperature <small>°F</small>	120	120	120	120	120	120	120
Maximum continuous dry service temperature <small>°F</small>	180	180	180	180	180	180	180

NOTES: <sup>1</sup> Taber H-18 wheel (mg / 1,000 revolutions @ 1,000 gram load) <sup>2</sup> Due to solvent loss

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance							
<b>ACIDS</b>							
Acetic 10%	○	○	○	○	○	●	○
Hydrochloric 10%	○	○	○	○	○	○	○
Sulfuric 10%	○	○	○	○	○	○	○
Sulfuric 50%	○	○	○	○	○	○	○
Phosphoric 10%	○	○	○	○	○	○	○
<b>ALCOHOLS</b>							
Methanol	○	○	○	○	○	○	○
Isopropanol	○	○	○	○	○	○	○
<b>KETONES</b>							
Acetone	○	○	○	○	○	○	○
Methyl ethyl ketone	○	○	○	○	○	○	○
<b>ALKALIS</b>							
Ammonium hydroxide 20%	○	○	○	○	○	○	○
Sodium hydroxide 10%	○	○	○	○	○	○	○
<b>HYDROCARBONS</b>							
Gasoline (unleaded)	○	○	○	○	○	○	○
Mineral spirits	○	○	○	○	○	○	○
<b>SALTS</b>							
Sodium chloride	○	○	○	○	○	○	○
Trisodium phosphate	○	○	○	○	○	○	○
Aluminum sulfate 10%	○	○	○	○	○	○	○
Sodium carbonate 10%	○	○	○	○	○	○	○





## Floor Repair and Resurfacing Product Selector Guide

Flooring Applications	Floor Patch™	Floor Patch™ FC	Ultra Quartz™	Floor Patch™ Resurfacer	Deep Pour Grout™	Concrete Crack Repair	Epoxy Concrete Sealer	Epoxy Coat™ 7000 Non VOC	Epoxy Coat™ 7000 AR	Floor Grip™
Acid-Resistant Coating			▼				▼		▼	
Anchoring Bolts in Concrete	▼	▼			▼					
Anti-Skid Floors / Ramps / Docks										▼
Chemical Containment Coatings			▼				▼		▼	
Chocking Equipment					▼					
Coatings (Impact, Abrasion)							▼	▼	▼	
Crack Filling						▼				
Expansion Joints	▼					▼				
Floor Coating							▼	▼	▼	
Floor Hole-Filling & Patching	▼	▼								
Floor Resurfacing (Up to 1")			▼	▼						
Leveling Equipment					▼					
Leveling Floors	▼			▼	▼					
Metal Coatings									▼	▼
Wet / Damp Surface Coatings	▼	▼	▼				▼			▼





## Floor Repair/Patching Compounds

100% solids epoxy-based polymers for patching, rebuilding and resurfacing concrete, brick, stucco and block.



National Components  
Program Listed PD  
#142113

### Devcon® Floor Patch™

All-purpose, easy-to-mix and apply concrete patching compound. With a compressive strength of 8,000 psi, Floor Patch™ provides three times the typical strength of concrete.

Item #	Container Size
13100	10 lb
13120	40 lb



National Components  
Program Listed PD  
#142113

### Devcon® Floor Patch™ FC (Fast-Cure)

With this fast-curing version of Floor Patch™, repaired areas can be back in service in 3 hours.

Item #	Container Size
13110	10 lb

### Devcon® Floor Patch™ Resurfacer

A three-part filled epoxy system for concrete floors where aggregate is exposed. This self-leveling product mixes easily, is ideal for repairing damaged concrete and rebuilding to depths of 1/4" to 1".

Item #	Container Size
13130	41 lb

### Devcon® FloorSavers™ Concrete Crack Repair

A self-leveling urethane compound designed to repair cracks and gaps in concrete – quickly and easily. Grey in color and cartridge fits in a standard caulking gun.

Item #	Container Size
13400	250 ml cartridge



### Devcon® Ultra Quartz™

Heavy-duty, trowelable premium floor patching system with excellent chemical resistance. System includes a primer for superior adhesion to cured concrete or other surfaces.

Item #	Container Size
13550	35 lb

### Devcon® Deep Pour Grout™

Filled epoxy grout for pouring machinery mounting pads to 6" deep and rebuilding worn concrete. Easy to mix and self-leveling.

Item #	Container Size
13800	50 lb

## Anti-Skid Additives

Granular additives used with Devcon floor coatings to produce anti-slip surfaces for worker safety.

### Devcon® Floor Grip™

Heavy-duty epoxy compound with silicone carbide granules produces an exceptional non-skid surface on walkways, ramps, loading docks and stairs. Excellent adhesion to concrete, brick, steel, aluminum and wet surfaces. Can be applied at temperatures as low as 40°F.

Item #	Container Size
13090	2 gal

## Floor Coatings

Epoxy floor coatings for protecting plant floors, platforms, walkways and ramps against acids, alkalis and solvents.

### Devcon® Epoxy Coat™ 7000 Non VOC

100% solids self-leveling coating for smooth or mildly spalled concrete. Produces an attractive, durable, chemical-resistant finish. Silica aggregate can be added to rebuild floors by 1/16" or more.

Item #	Container Size
12710	2 gal



National Components  
Program Listed PD  
#144811

### Devcon® Epoxy Coat™ 7000 AR (Acid Resistant)

Novolac non-VOC epoxy coating provides superior resistance to concentrated acids (including 98% sulfuric) and chemicals. Excellent adhesion to concrete surfaces. Ideal for use around chemical storage tanks, dike walls and containment areas.

Item #	Container Size
12750	2 gal

### Devcon® Epoxy Concrete Sealer

Self-leveling, non-VOC clear epoxy sealer can be used as a primer on damp surfaces. Easily applied by brush, roller or squeegee at temperatures as low as 40°F. Outstanding resistance to chemicals, acids, alkalis and hydrocarbons.

Item #	Container Size
12560	2 gal



🇨🇦 Canadian part numbers are the same as US part numbers.

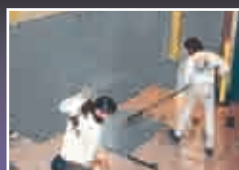




Physical Properties	Floor Patch™	Floor Patch™ FC	Ultra Quartz™	Floor Patch™ Resurfacer	Deep Pour Grout™	Concrete Crack Repair	Epoxy Concrete Sealer	Epoxy Coat™ 7000 Non VOC	Epoxy Coat™ 7000 AR
Coverage per unit <i>feet<sup>2</sup> @ thickness</i>	18 @ 0.25" / 40 lb unit	4.5 @ 0.25" / 10 lb unit	13 @ 0.25" / 35 lb unit	568 inches <sup>2</sup> / 41 lb unit	640 inches <sup>2</sup> / 50 lb unit	20.3 Lft @ 0.25" / 250 mils	400 @ 8 mils	400 @ 8 mils	200 @ 16 mils
Mixed viscosity <i>cP</i>	Putty	Putty	Putty	5,000	13,000	3,250	2,000	2,000	3,600
Minimum application temperature <i>°F</i>	60 ~ 90	60 ~ 90	60 ~ 90	50 ~ 90	50 ~ 90	50 ~ 90	40 ~ 90	55 ~ 90	60 ~ 90
Pot life <i>minutes @ 75°F</i>	45	15	60	40	40	1.5	60	55	36
Functional cure <i>hours</i>	16	3	16	24	16	30 min	24	24	24
Cured hardness (ASTM D2240) <i>Shore D</i>	85	85	95	85	83	53	85	85	85
Maximum continuous service temperature <i>°F</i>	250	250	250	180	180	250	180	180	200
% Solids	100	100	100	100	100	100	100	100	100

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance									
<b>ACIDS</b>									
Acetic 10%	○	○	○	○	○	N/A	○	○	○
Hydrochloric 10%	●	●	●	○	●		●	●	●
Sulfuric 10%	●	●	●	○	●		●	●	●
<b>ALCOHOLS</b>									
Methanol	○	○	○	○	○	N/A	○	○	○
Isopropanol	○	○	○	○	○		○	○	○
<b>KETONES</b>									
Acetone	○	○	○	○	○	N/A	○	○	○
Methyl ethyl ketone	○	○	○	○	○		○	○	○
<b>ALKALIS</b>									
Ammonium hydroxide 20%	○	○	●	○	○	N/A	○	●	○
Sodium hydroxide 10%	○	○	●	●	○		●	●	●
<b>HYDROCARBONS</b>									
Gasoline (unleaded)	○	○	●	○	○	N/A	○	○	●
Mineral spirits	○	○	●	●	○		○	○	●
<b>CHLORINATED HYDROCARBONS</b>									
1-1 Trichloroethane	○	○	●	○	○	N/A	●	○	○
<b>SALTS</b>									
Sodium chloride	●	●	●	○	○	N/A	○	○	●
Trisodium phosphate	●	●	●	○	○		○	○	●



## Emergency Repair Products

These epoxy compounds cure rapidly — even under water — to form strong, permanent repairs, minimizing spills due to leaks or accidental punctures as well as remediation costs.

### Devcon® Magic Bond™ Epoxy Putty

Seals leaks and repairs gouges in steel, aluminum, wood, fiberglass, concrete and ceramics. Two-color stick ensures thorough mixing. Cures rock-hard in 30 minutes. Can be painted, sanded, machined, tapped or drilled.

**Item # Container Size**  
11600 4 oz stick

### Devcon® Zip Patch™

Easy-to-use adhesive patch kit for permanent water-proof repairs to pipes, tanks and drums. Hardens in minutes at room temperature.

**Item # Container Size**  
11500 4" x 9" patch

### Devcon® Underwater Repair Putty (UW)

Water-resistant putty for repairing, patching and rebuilding equipment in underwater or habitually wet environments.

**Item # Container Size**  
11800 1 lb

### Devcon® Magic Sorb™ Spill Cleanup Products

Ideal for containment and cleanup of chemical, acid and hydrocarbon spills.

**Item # Container Size**  
48000 Bag 25 lb  
48100 Sock 3" diameter x 42"

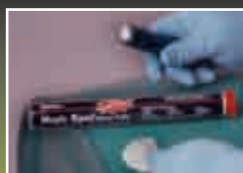


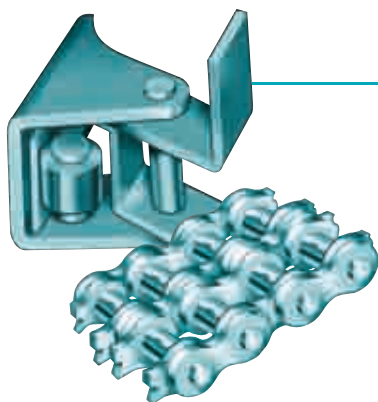
Physical Properties	Magic Bond™ Epoxy Putty	Zip Patch™	Underwater Repair Putty (UW)
<b>Color</b>	Light Grey	Brown	Grey
<b>Mix ratio by weight / volume</b> resin:hardener	1:1	N / A	1.4:1 / 1:1
<b>Mixed viscosity</b> cP	Putty	17,000	Putty
<b>Functional cure</b> hours	1	1	24
<b>Pot life</b> minutes @ 75°F	20	5	45
<b>Specific volume</b> inches <sup>3</sup> /pound	15.3	N / A	17.0
<b>Coverage per pound</b> inches <sup>2</sup> @ 1/4" thickness	61	N / A	68
<b>Cured hardness (ASTM D2240)</b> Shore D	83	70	82
<b>Cured shrinkage (ASTM D2566)</b> inch/inch	0.0030	0.0010	0.0020
<b>Adhesive tensile shear (ASTM D1002)</b> psi	920	2,400	2,685
<b>Compressive strength (ASTM D695)</b> psi	12,000	N / A	5,625
<b>Flexural strength (ASTM D790)</b> psi	4,280	19,000	4,990
<b>Modulus of elasticity (ASTM D638)</b> psi x 10 <sup>5</sup>	7.0	2.9	7.5
<b>Coefficient of thermal expansion (ASTM D696)</b> [(in)/(in x °F)] x 10 <sup>-6</sup>	21	64	18
<b>Thermal conductivity (ASTM C177)</b> [(cal x cm)/(sec x cm <sup>2</sup> x °C)] x 10 <sup>-3</sup>	1.24	1.71	1.41
<b>Dielectric constant (ASTM D150)</b> 1 kHz	28.1	43.5	8.6
<b>Dielectric strength (ASTM D149)</b> volts/mil	300	250	150
<b>Maximum continuous dry service temperature</b> °F	250	200	250

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance			
<b>ACIDS</b>			
Acetic 10%	○	○	○
Hydrochloric 10%	○	●	○
Sulfuric 10%	○	●	○
<b>ALCOHOLS</b>			
Methanol	○	○	○
Isopropanol	○	○	○
<b>KETONES</b>			
Acetone	○	○	○
Methyl ethyl ketone	○	○	○
<b>ALKALIS</b>			
Ammonium hydroxide 20%	●	○	●
Sodium hydroxide 10%	●	○	●
<b>HYDROCARBONS</b>			
Gasoline (unleaded)	●	●	●
Mineral spirits	●	○	●
<b>CHLORINATED HYDROCARBONS</b>			
Perchloroethylene	○	○	●
1-1-1 Trichloroethane	○	○	●
<b>SALTS</b>			
Sodium chloride	○	○	●
Trisodium phosphate	○	○	●

Canadian part numbers are the same as US part numbers.





## Permatex® Anti-Seize & Lubricants

Permatex® Anti-Seize Compounds protect mated metal parts against in-service rusting, corrosion, friction and galling. Made to serve the demanding needs of even the most severe industrial environments. They reduce wrench torque and ease assembly and disassembly of threaded, slip-fit and press-fit connections. Depend on Permatex® Anti-Seizes to reduce friction and wear, even at temperatures up to 2,400°F (1,316°C).

Permatex® Lubricants and Penetrants are formulated to protect and lubricate a wide array of parts and components.

### Permatex® Anti-Seize Lubricant

A heavy-duty blend of aluminum, copper and graphite lubricants in a petroleum base. Use during assembly to prevent galling, corrosion and seizing and to assure easier disassembly. An inert formulation, it will not evaporate or harden in extreme temperatures. Salt-, corrosion- and moisture-resistant. Temperature range -60°F to 1,600°F (-51°C to 871°C). Non-aerosol version meets MIL-SPEC A-907. ▲ NFPA Fire Code 30B: Level 3 (aerosol).

Item #	Container Size	P/N	Canada
80071	4 oz brush-top bottle		80558
80078	8 oz brush-top bottle	133K	
81464	12 oz aerosol can, 8.5 oz net wt	133MA	81464
80208	16 oz brush-top bottle	767	17511

### Permatex® Copper Anti-Seize Lubricant

A premium quality copper anti-seize and thread lubricant that may be used to prevent seizing, corrosion and galling where high temperature conditions exist. Temperature range -30°F to 1,800°F (-34°C to 982°C). Provides good electrical conductivity. Meets MIL-SPEC A-907.

Item #	Container Size	Canada
09128	8 oz brush-top bottle	09127
31163	16 oz brush-top bottle	09124

### Permatex® Nickel Anti-Seize Lubricant

Copper-free anti-seize lubricant that protects metal parts from seizing and galling at temperatures up to 2,400°F (1,316°C). Ideal for use under conditions of extreme pressure and temperature and with stainless steel, titanium and nickel alloys.

Item #	Container Size	P/N	Canada
77124	8 oz brush-top bottle	771	77124
77164	16 oz brush-top bottle	771	77164

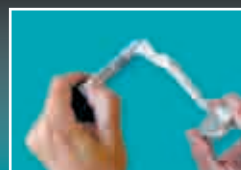
### Permatex® Dielectric Grease

Protects electrical connections and wiring from salt, dirt and corrosion. Extends the life of bulb sockets. Prevents voltage leakage around any electrical connection. Also prevents spark plugs from fusing to boots. Required for modern high-energy ignition systems.

Item #	Container Size	Canada
22058	3 oz tube, carded	22064



Canada Canadian part numbers





## Gasket Sealants and Remover



### Permatex® Form-A-Gasket® No. 1 Sealant

Reliable paste-like gasket sealant/dressing/coating. Form-A-Gasket® No. 1 sets quickly. Recommended for rigid, permanent assemblies. Use to 400°F (204°C). Resistant to gasoline and other solvents. Conforms to MIL-S-45180 D, Type I.

Item #	Container Size	P/N	Canada
80003	11 oz tube, boxed	1C	80003

### Permatex® Form-A-Gasket® No. 2 Sealant

Reliable paste-like gasket sealant/dressing/coating. Form-A-Gasket® No. 2 sets more slowly to a pliable film best suited for non-rigid, vibrating assemblies. Use to 400°F (204°C). Resistant to gasoline and other solvents. Conforms to MIL-S-45180 D, Type II.

Item #	Container Size	P/N	Canada
80015	1.5 oz tube, carded	2AR	
80016	3 oz tube, carded	2BR	80500
80011	11 oz tube, boxed	2C	

### Permatex® Aviation Form-A-Gasket® No. 3 Sealant

Non-hardening liquid gasket sealant/dressing/coating is a thin, brushable dressing or sealer for close-fitting parts. Suitable for continuous temperatures to 400°F (204°C). Resistant to antifreeze, aviation fuels, high-detergent oils and lubricants. Conforms to MIL-S-45180 D, Type III.

Item #	Container Size	P/N	Canada
80017	16 fl oz bottle	3D	80502

### Permatex® High Tack™ Spray-A-Gasket® Sealant

Red colored, all-purpose sealant that holds even the heaviest of gaskets in place during assembly. Seals and bonds rubber, cork, paper, felt and metal gaskets. Sets quickly to a very tacky film. Suitable to 500°F (260°C). Contains no ozone-depleting compounds. Resists gasoline, oil, kerosene, propane and butane. ▲ NFPA Fire Code 30B: Level 3.

Item #	Container Size	P/N	Canada
80065	12 oz aerosol can/ 9 oz net wt	99MA	80546

## Specialty Maintenance

Permatex® products for specialized maintenance as well as specially packaged products for general maintenance.

### Permatex® Prussian Blue

Aids precision fitting of machined surfaces. Locates high spots on bearings, valves and other close-to-tolerance components. Non-drying. Easy cleanup.

Item #	Container Size	P/N	Canada
80038	.75 fl oz tube	35V	80518



### Permatex® Counterman's Choice® Medium Strength Threadlocker Blue

An all-purpose, medium strength threadlocker. Ideal for all nut and bolt applications 1/4" to 3/4" (6 mm to 20 mm).

Item #	Container Size
09978	1 g pouch

### Permatex® Counterman's Choice® Anti-Seize Lubricant

Heavy-duty blend of aluminum, copper and graphite lubricants in a petroleum base. Use during assembly to prevent galling, corrosion and seizing.

Item #	Container Size
09975	5 g pouch

Canada Canadian part numbers

Canada Canadian part numbers



## Permatex® Hand Cleaners

You need a waterless hand cleaner that really cleans – without turning your hands into sandpaper. You need the strength to remove grease, grime, paint, adhesives and all other soils your working hands get into – plus conditioners to prevent your hands from cracking and drying out. Permatex® hand cleaners are the choice of working hands. For over 50 years, Permatex® has offered high-quality hand cleaners and has maintained a leadership position through innovation and a concern for users' needs. Wherever hands are getting dirty, there's a place for Permatex® hand cleaners. To meet your growing needs, Permatex® offers a broad selection of product formulations and sizes.

### Permatex® Fast Orange® Pumice and Smooth Lotion Hand Cleaners

Industrial grade, biodegradable\*, waterless, petroleum solvent-free hand cleaner. It contains no harsh chemicals, mineral oils or ammonia that can sting cuts and abrasions. Pure, fresh-smelling natural citrus power does the cleaning while aloe, lanolin, glycerin and jojoba condition and protect skin. Fast Orange® gently deep cleans the toughest dirt and grease.

#### Pumice Lotion

Item #	Container Size	Canada
25108	7.5 fl oz bottle	20857
25116	15 fl oz squeeze bottle	20859
25219	1 gallon bottle w/pump	20861
25104	1 gallon flat-top bottle	25104

#### Smooth Lotion

Item #	Container Size	Canada
23108	7.5 fl oz bottle	20851
23116	15 fl oz squeeze bottle	20853
23218	1 gallon bottle w/pump	20855

### Permatex® Fast Orange® Hand Cleaner Wipes

Fast Orange® Hand Cleaner Wipes remove the toughest grease, tar, grime, ink, paints, sealants, adhesives and other difficult soils. Each pre-moistened wipe has a textured surface on one side that is ideal for cleaning heavy-duty soils from hands, tools and work areas. The wipes also have a smooth side for general purpose cleaning.

Item #	Container Size	Canada
25072	72-count bucket	25072

### DL® Permatex® Trounce® Lotion and Hand Cleaner

Pleasantly scented with fine ground pumice for deep scrubbing to remove the most difficult soils. This fast-acting formula won't irritate hands or leave a greasy residue. Professional strength.

Item #	Container Size	Canada
21218	1 gallon bottle w/pump	21218



Canada Canadian part numbers

♦ Biodegradable according to 40 CFR 796.3240



## Specialty Adhesives

High-performance adhesives  
for specialized applications.



### Permatex® Clear RTV Silicone Adhesive Sealant

General-purpose, clear RTV sealant. Seals, bonds, repairs, mends and secures glass, metal, plastics, fabric, vinyl, weather stripping and vinyl tops. May be applied to horizontal or vertical surfaces. Waterproof and flexible. Temperature range -75°F to 400°F (-59°C to 204°C); resists oil, water, weather, vibration, grease and more. Nonpaintable. MIL-A-46106B, Type I.

Item #	Container Size	P/N	Canada
80050	3 oz tube, carded	66BR	80533
81913	7.25 oz Automatic Tube®		
85913	7.25 oz PowerBead™ can		85913
80855	11 oz cartridge	66C	80834

### Permatex® Black Silicone Adhesive Sealant

General-purpose, black RTV sealant. Seals, bonds, repairs, mends and secures glass, metal, plastics, fabric, vinyl, weather stripping and vinyl tops. May be applied to horizontal or vertical surfaces. Waterproof and flexible. Temperature range -75°F to 450°F (-59°C to 232°C); resists oil, water, weather, vibration, grease and more. Nonpaintable. MIL-A-46106B, Type I.

Item #	Container Size	P/N	Canada
81158	3 oz tube, carded	16BR	81237
81173	12.9 oz cartridge	16C	81238

### Permatex® Fast Cure Epoxy

Convenient premeasured epoxy mixer cups. No mess, no guess, no waste. Ideal for bonding glass, hard plastics, rubber and metal. Bonds in 5-15 minutes. Grey adhesive has excellent chemical resistance. Fills porosities and can be used to build up worn parts.

Item #	Container Size	Canada
21425	4 g mixer cups	21425

### Devcon® Duco® Cement

Clear all-purpose waterproof household glue. Ideal for china, glass, plastic, wood and metal and is fast-drying.

Item #	Container Size	Canada
6245	1 fl oz	6245

### Devcon® Silite® Silicone RTV-Clear

Single-component sealant for gasketing, sealing, bonding, and weatherproofing applications. Cures at room temperature to a clear, flexible silicone rubber. Can be used to seal window plates, ceramic tile, and bond gaskets. Excellent resistance to a wide range of weather and temperatures ranging from -60° to 450°F (-50° to 232°C). Acceptable for use in meat and poultry plants. Listed under NSN Stock#8040-01-193-3312, qualifies under MIL-A-46106A, Galv. Repair.

Item #	Container Size	Canada
17100	3 oz tube, boxed	17100
17150	10.3 oz cartridge	17150



### Devcon® Silite® Silicone RTV-White

Single-component sealant for gasketing, sealing, bonding, and weatherproofing applications. Cures at room temperature to a white, flexible silicone rubber. Can be used to seal panels, bond and seal appliance ports, attach brackets, nameplates, and bond gaskets. Excellent resistance to a wide range of weather and temperatures ranging from -60° to 450°F (-50° to 232°C). Acceptable for use in meat and poultry plants. Qualifies under MIL-A-46106A, Galv. Repair.

Item #	Container Size	Canada
17140	10.3 oz cartridge	17140

### Devcon® Silite® Silicone RTV-Red (High Temp.)

High-temperature silicone rubber with a temperature resistance of up to 600°F for bonding and sealing. Used for assembly or repair of high-temperature ducting, bonding ceramic tile in pulverizers, and making form-in-place gaskets. Cures at room temperature. Acceptable for use in meat and poultry plants. Qualifies under MIL-A-46106A, Galv. Repair.

Item #	Container Size	Canada
17130	10.3 oz cartridge	17130

Canada Canadian part numbers





## Products for Both Maintenance/Repair and OEM Assembly

Certain products are hard to keep in stock because everyone in the plant—from production to maintenance—uses them routinely. Today, with it's highly respected Permatex® brands, ITW Devcon offers field-proven products to improve reliability in both assembly and repair applications.



### Permatex® products for both Assembly and Repair include:

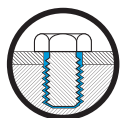
- ▼ Permatex® liquid and gel threadlockers to prevent fastener loosening caused by shock or vibration, and to protect against rust and corrosion
- ▼ Permatex® retaining compounds to secure and protect non-threaded assemblies
- ▼ Permatex® thread sealants to lubricate and protect threads and prevent leakage in both high-pressure and low-pressure systems
- ▼ Permatex® anaerobic and RTV silicone form-in-place gasket makers, dressings and general-purpose sealants



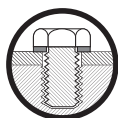


## Permatex® Liquid Threadlockers... Providing Threaded Fastener Reliability

Permatex® Threadlockers are superior to conventional lock washers, nylon inserts and other mechanical devices because they secure the entire fastener assembly against loosening from shock or vibration and maintain fastener clamping forces. Threadlockers also seal the threads against leakage and prevent rust and corrosion. Available in a variety of strengths and temperature ranges, threadlockers remain the most reliable way to lock and seal threaded fasteners of all shapes and sizes, either before or after assembly.



VS.



### PERMATEX® THREADLOCKER

Entire threaded area filled with threadlocker.  
ONE DROP FITS ALL!  
Threads sealed—moisture can't get inside.

### LOCK WASHER

Contact only under bolt—bolt can vibrate loose.  
Must use right size.  
Threads open—moisture can get in causing corrosion.



## Permatex® Liquid Threadlockers

Product	Item Number	Container Size	Typical Use	Color	Viscosity cP	Break/Prevail Torque <i>in-lbs</i> <sup>1</sup>	Temperature Range	Fixture Time <sup>2</sup> / Full Cure	Fixture with Primer	Specific Gravity
Permatex® Low Strength Threadlocker PURPLE	22250 22225	50 ml bottle 250 ml bottle	Up to 1/4" (6 mm)	Purple	1,200/5,000 Thixotropic	62/27	-65° to 300°F (-54° to 149°C)	20 min/ 24 hrs	5 min	1.05
Permatex® Medium Strength Threadlocker BLUE	24210 24250 24225	10 ml bottle 50 ml bottle 250 ml bottle	1/4" to 3/4" (6-20 mm)	Blue	1,200/6,000 Thixotropic	115/53	-65° to 300°F (-54° to 149°C)	20 min/ 24 hrs	5 min	1.00
Permatex® Surface Insensitive Threadlocker BLUE	24350 24325	50 ml bottle 250 ml bottle	1/4" to 3/4" (6-20 mm)	Blue	2,250/12,000 Thixotropic	180/62	-65° to 300°F (-54° to 149°C)	20 min/ 24 hrs	5 min	1.08
Permatex® Permanent Strength Threadlocker RED	26210 26250 26225 26201	10 ml bottle 50 ml bottle 250 ml bottle 1 L bottle	3/8" to 1" (10-25 mm)	Red	1,800/5,000 Thixotropic	189/275	-65° to 300°F (-54° to 149°C)	20 min/ 24 hrs	5 min	1.10
Permatex® High Strength Threadlocker RED	27110 27150 27125	10 ml bottle 50 ml bottle 250 ml bottle	3/8" to 1" (10-25 mm)	Red	500	230/225	-65° to 300°F (-54° to 149°C)	20 min/ 24 hrs	5 min	1.10
Permatex® High Temperature Threadlocker RED	27250 27225	50 ml bottle 250 ml bottle	3/8" to 1 1/2" (10-38 mm)	Red	10,000	180/270	-65° to 450°F (-54° to 232°C)	30 min/ 24 hrs	5 min	1.11
Permatex® Large Diameter Threadlocker RED	27750 27725	50 ml bottle 250 ml bottle	1" and over (25 mm+)	Red	7,000	250/200	-65° to 300°F (-54° to 149°C)	60 min/ 24 hrs	5 min	1.12
Permatex® Penetrating Grade Threadlocker GREEN	29050 29025	50 ml bottle 250 ml bottle	#2 to 1/2" (2.2-12 mm)	Green	12	90/310	-65° to 300°F (-54° to 149°C)	20 min/ 24 hrs	3 min	1.08

NOTES: <sup>1</sup> .375" x 16 phosphate steel <sup>2</sup> Fixture strength is equivalent to 20% of full cure strength



## Permatex® Threadlockers... Exceptional Performance, Reliability and Value



### Permatex® Medium Strength Threadlocker BLUE



All-purpose, medium strength threadlocker. Ideal for all nut and bolt applications 1/4" to 3/4" (6 mm to 20 mm). Eliminates need for stocking expensive lock nuts and lock washers. Locks and seals while preventing parts from loosening due to vibration. Protects threads from corrosion. Removable with hand tools for easy disassembly. MIL-SPEC (S-46163A), Type II, Grade N.

Item #	Container Size	Canada
24210	10 ml bottle, carded	24210
	36 ml bottle	24242
24250	50 ml bottle	24250
24225	250 ml bottle	24225

### Permatex® High Strength Threadlocker RED

High strength threadlocker for heavy-duty applications 3/8" to 1" (10 mm to 25 mm). Especially well suited for permanently locking studs. Locks against vibration loosening. Removable with heat and hand tools. MIL-SPEC (S-46163A), Type I, Grade K.

Item #	Container Size	Canada
27110	10 ml bottle, carded	27110
27150	50 ml bottle	27150
27125	250 ml bottle	27125

### Permatex® Permanent Strength Threadlocker RED



A permanent, high strength threadlocker that is applied to fasteners 3/8" to 1" (10 mm to 25 mm) in size before assembly. Designed for securing parts that must withstand heavy shock, vibration or extreme chemical or environmental conditions. Localized heat and hand tools are required to separate parts. MIL-SPEC (S-46163A), Type II, Grade O.

Item #	Container Size	Canada
26210	10 ml bottle, carded	26210
	36 ml bottle	26242
26250	50 ml bottle	26250
26225	250 ml bottle	26225
26201	1 L bottle	

### Permatex® Penetrating Grade Threadlocker GREEN



A low viscosity threadlocking liquid that wicks along the threads of preassembled fasteners to secure them in place. Since it is applied after assembly, preventive maintenance procedures are simplified. Ideal for fasteners ranging from #2 to 1/2" (2.2 to 12 mm) in size. Localized heating and hand tools are needed for disassembly. MIL-SPEC (S-46163A), Type III, Grade R.

Item #	Container Size	Canada
29050	50 ml bottle	29050
29025	250 ml bottle	29025

### Permatex® Low Strength Threadlocker PURPLE



Low strength threadlocker designed for fasteners under 1/4" (6 mm) that require occasional adjustment. Removable with hand tools for easy disassembly. MIL-SPEC (S-46163A), Type II, Grade M.

Item #	Container Size	Canada
22250	50 ml bottle	22250
22225	250 ml bottle	22225

### Permatex® Surface Insensitive Threadlocker BLUE

Medium/High strength threadlocker for general-purpose applications. Especially well-suited for 1/4" to 3/4" (6 mm to 20 mm) fasteners that have a slight oil film. Prevents vibration loosening.

Item #	Container Size	Canada
24350	50 ml bottle	24350
24325	250 ml bottle	24325

### Permatex® Large Diameter Threadlocker RED

A high strength adhesive for locking and sealing large bolts and studs 1" (25 mm+) or larger in diameter. Heat may be required to weaken bond before parts can be disassembled. MIL-SPEC (S-46163A), Type I, Grade L.

Item #	Container Size	Canada
27750	50 ml bottle	27750
27725	250 ml bottle	27725

### Permatex® High Temperature Threadlocker RED

Hi-temp/hi-strength threadlocker for heavy-duty applications. Prevents bolts 3/8" to 1 1/2" (10 mm to 38 mm) from loosening due to shock, severe vibration and heat stress. Suited for temperatures up to 450°F (232°C). Removable with heat and hand tools.

Item #	Container Size	Canada
27250	50 ml bottle	27250
27225	250 ml bottle	27225

Canada Canadian part numbers



## Permatex® GEL TWIST™ Threadlockers... TRUE Threadlocking Innovation!

Permatex® Threadlocker Gels are the true innovation in threadlocking! Available in Medium Strength BLUE Gel and High Strength RED Gel, the unique Permatex® GEL TWIST™ applicators leave the threadlocker where you want it... on the part! No more liquid drips or solid stick globs to deal with. No more mess to clean or costly waste to worry about. Permatex® Threadlocker Gels eliminate these hassles while still providing "liquid quality" application reliability.



### Permatex® Medium Strength Threadlocker BLUE Gel



An all-purpose, medium strength blue threadlocker gel that reliably secures all nut and bolt applications 1/4" to 1" (6 mm to 25 mm). Locks and seals while preventing parts from loosening due to vibration. Protects threads from corrosion. Removable with hand tools for easy disassembly.

Item #	Container Size	Canada
24010	10 g GEL TWIST™ applicator, carded	24215

### Permatex® High Strength Threadlocker RED Gel



A high strength threadlocker red gel for heavy-duty applications. Ideal for reliably securing all permanent nut and bolt applications 3/8" to 1" (10 mm to 25 mm) and greater. Locks and seals while preventing parts from loosening due to vibration. Protects threads from corrosion. Requires heat or special tools for removal.

Item #	Container Size	Canada
27010	10 g GEL TWIST™ applicator, carded	27115



### Permatex® GEL TWIST™ Threadlockers

Product	Item Number	Container Size	Typical Use	Color	Viscosity cP	Break / Prevail Torque <i>in-lbs</i> <sup>1</sup>	Temperature Range	Fixture Time <sup>2</sup> / Full Cure	Specific Gravity
Permatex® Medium Strength Threadlocker BLUE Gel	24010	10 g GEL TWIST™ Applicator	1/4" to 1" (6-25 mm)	Blue	75,000/ 900,000 Thixotropic	115/53	-65° to 300°F (-54° to 149°C)	15 min/ 24 hrs	1.15
Permatex® High Strength Threadlocker RED Gel	27010	10 g GEL TWIST™ Applicator	3/8" to 1" (10-25 mm) and greater	Red	75,000/ 900,000 Thixotropic	175/230	-65° to 300°F (-54° to 149°C)	15 min/ 24 hrs	1.13

NOTES: <sup>1</sup> .375" x 16 phosphate steel <sup>2</sup> Fixture strength is equivalent to 20% of full cure strength

Canada Canadian part numbers







## Permatex® Retaining Compounds

Permatex® Retaining Compounds are designed to bond non-threaded, cylindrical, metal assemblies by filling the voids between close-fitting metal parts. Retaining Compounds harden to create a solid, one-piece assembly. Retaining Compounds can be used to lock keyways, secure splines, augment press fits and strengthen interference fits. Use them to prevent wear on new components, or restore the fit to worn or out-of-tolerance parts. Retaining Compounds seal joints against leakage and prevent fretting and corrosion. Formulated in a variety of viscosities, strength characteristics, gap-filling abilities and temperature ranges, Permatex® Retaining Compounds can solve even the most difficult retaining applications.

### Permatex® Bearing Mount for Close Fits

A low viscosity, rapid-curing anaerobic adhesive that augments the strength of press fit assemblies. Prevents fretting and corrosion. Up to 3,000 psi holding power. MIL-SPEC (R-46082B), Type I.

Item #	Container Size	Canada
60950	50 ml bottle	60950
60925	250 ml bottle	60925

### Permatex® Bearing Mount for Relaxed Fits



High strength, medium viscosity anaerobic adhesive for slip fit assemblies. Provides 3,500 psi shear strength on steel. Prevents fretting and corrosion. Fixture time is 10 minutes at room temperature.

Item #	Container Size	Canada
68050	50 ml bottle	68050
68025	250 ml bottle	68025

### Permatex® Bearing Mount for Worn Parts

A creamy, non-running gel that can be applied onto cylindrical parts to fill surface imperfections and repair worn areas. It contains no metal, but once assembled, hardens to a strength that often doubles that of a press fit. Use to salvage worn metallic parts or to keep machinery running until new parts arrive. Product remaining outside the joint does not dry, allowing for easy clean up. Use to 300°F (149°C). Can bond cylindrical assemblies, particularly where gaps approach 0.50 mm.

Item #	Container Size	Canada
66050	50 ml tube, carded	66050

### Permatex® High Temperature Sleeve Retainer

High temperature (up to 400°F / 204°C) anaerobic adhesive that secures slip and press fit assemblies. Up to 3,000 psi holding power. Restores fit to worn or out-of-tolerance assemblies. Prevents fretting and corrosion. MIL-SPEC (R-46082B), Type II.

Item #	Container Size	Canada
64050	50 ml bottle	64050

### Permatex® Maximum Temperature Bearing Mount

Maximum temperature (up to 450°F / 232°C) anaerobic retaining adhesive for close fitting cylindrical joints. Provides excellent resistance at elevated temperatures.

Item #	Container Size	Canada
62050	50 ml bottle	62050

## Permatex® Retaining Compounds

Product	Item Number	Container Size	Color	Maximum Diametral Gap Fill	Viscosity cP	Shear Strength psi	Temperature Range	Fixture Time/ Full Cure (on Steel)	Specific Gravity
Permatex® Bearing Mount For Close Fits	60950 60925	50 ml bottle 250 ml bottle	Green	.005"	125	3,000	-65° to 300°F (-54° to 149°C)	10 min/ 24 hrs	1.10
Permatex® Maximum Temperature Bearing Mount	62050	50 ml bottle	Green	.015"	8,500	3,800	-65° to 450°F (-54° to 232°C)	1 hr/ 24 hrs	1.16
Permatex® High Temperature Sleeve Retainer	64050	50 ml bottle	Green	.007"	600	3,000	-65° to 400°F (-54° to 204°C)	1 hr/ 24 hrs	1.12
Permatex® Bearing Mount For Worn Parts	66050	50 ml tube	Silver	.020"	1,200,000	3,000	-65° to 300°F (-54° to 149°C)	10 min/ 1-2 hrs	1.13
Permatex® Bearing Mount For Relaxed Fits	68050 68025	50 ml bottle 250 ml bottle	Green	.015"	1,250	3,800	-65° to 300°F (-54° to 149°C)	10 min/ 24 hrs	1.10

Canada Canadian part numbers





## Permatex® Thread Sealants

Permatex® Thread Sealants seal and secure metal pipes and fittings. By filling the space between threaded metal parts, Thread Sealants prevent leakage caused by vibration loosening, tape shredding, solvent evaporation, damaged threads and temperature cycling. Designed for low- and high-pressure applications, Thread Sealants seal instantly for online low-pressure testing. When fully cured, they seal to the burst strength of most piping systems. The high lubricating properties of Permatex® Thread Sealants ease assembly and prevent galling of the threads. For system repairs, parts may be disassembled with basic hand tools.



### Permatex® High Performance Thread Sealant



Formulated specifically for metal, tapered pipe thread fittings. High Performance Thread Sealant replaces tapes and pipe dopes. Cures rapidly to withstand 10,000 psi. Prevents galling and protects mated threaded areas from rust and corrosion. Contains PTFE.

Item #	Container Size	Canadian Part Number
56521	50 ml tube, carded	19545
56525	250 ml tube	56525

### Permatex® High Temperature Thread Sealant

Locks and seals threaded fittings. Resists leakage, vibration loosening, moisture, hydraulic fluids and diesel fuels. Lubricates threads for easy assembly and disassembly. Won't shred or tear like tape. Parts may be repositioned up to 4 hours after application. Contains PTFE. Temperature range from -65°F to 400°F (-54°C to 204°C).

Item #	Container Size	Canadian Part Number
59235	50 ml tube, carded	17358
59225	250 ml tube	59225

### Permatex® Maximum Temperature Thread Sealant

A high performance, solvent resistant sealant that locks and seals metal tapered pipe threads and fittings. Specifically formulated for aluminum, stainless steel, galvanized metal and other inert metals. Temperature range -65°F to 400°F (-54°C to 204°C). Contains PTFE.

Item #	Container Size	Canadian Part Number
56750	50 ml tube, carded	56750
56725	250 ml tube	56725

### Permatex® Thread Sealant with PTFE

Economical general-purpose fitting sealant. Outperforms tapes and pipe dopes. Seals and resists pressure in air, oil, diesel fuel and hydraulic systems. Remains pliable at high and low temperatures. Temperature range -65°F to 300°F (-54°C to 149°C); resists common shop fluids.

Item #	Container Size	P/N	Canadian Part Number
80632	4 oz can	14H	80510
80633	16 oz can	14D	80633

### Permatex® Pneumatic/Hydraulic Sealant

Designed for locking and sealing high pressure hydraulic and pneumatic systems. Contains no fillers or particles which could contaminate system fluids, foul valves or clog fine filters and screens. Reliably cures on "as received" fasteners and controlled locking strength affords easy disassembly.

Item #	Container Size	Canadian Part Number
54550	50 ml bottle	54550

### Permatex® Pipe Joint Compound

Universal sealant. Lubricates and seals threaded joints on water, oil and fuel lines. Temperature range -65°F to 400°F (-54°C to 204°C); resists common shop fluids.

Item #	Container Size	P/N	Canadian Part Number
80045	16 oz bottle	51D	80045

## Permatex® Thread Sealants

Product	Item Number	Container Size	Color	Viscosity cP	Seal to Operating Pressure	Temperature Range	Specific Gravity
Permatex® High Performance Thread Sealant	56521 56525	50 ml tube 250 ml tube	White	300,000	4 hrs	-65° to 300°F (-54° to 149°C)	1.10
Permatex® High Temperature Thread Sealant	59235 59225	50 ml tube 250 ml tube	White	350,000	4 hrs	-65° to 400°F (-54° to 204°C)	1.21
Permatex® Maximum Temperature Thread Sealant	56750 56725	50 ml tube 250 ml tube	White	300,000	4 hrs	-65° to 400°F (-54° to 204°C)	1.10
Permatex® Thread Sealant w/PTFE	80632 80633	4 oz can 16 oz can	White	55,000	Instant/ Non-Curing	-65° to 300°F (-54° to 149°C)	1.12
Permatex® Pneumatic/Hydraulic Sealant	54550	50 ml bottle	Purple	14,000	4 hrs	-65° to 300°F (-54° to 149°C)	1.02
Permatex® Pipe Joint Compound	80045	16 oz bottle	Black	40,000	Instant/ Non-Curing	-65° to 400°F (-54° to 204°C)	1.28

Canadian part numbers

## Activators

### Permatex® Surface Prep™ Activator for Anaerobics

Speeds cure of Permatex® Threadlockers, Thread Sealants, Retaining Compounds and Anaerobic Gasket Makers. Recommended for use during cold weather. General purpose solvent for preparing parts and surfaces.

▲ NFPA Fire Code 30B: Level 1.

Item #	Container Size	Canadian Part Number
24163	6 oz aerosol can, 4.5 oz net wt	24163



## Permatex® Gasket Makers

Permatex®, the leader in form-in-place gasket makers, gasket dressings and general-purpose sealants for over a century, has an extensive selection of anaerobics, RTV silicones and solvent-based products to meet all your gasketing and sealing needs.

### Anaerobic Gasket Makers

- Rigid assemblies
- Designed to eliminate movement
- Gaps up to 0.050" primed
- High chemical resistance
- Maximum temperature of 400°F

### RTV Silicone Gasket Makers

- Instant seal with the Right Stuff®
- Flexible joints
- Use with dissimilar materials
- Gaps up to 0.250"
- Temperatures to 600°F



### Permatex® PowerBead™... the ultimate dispensing system

- Makes application quick and easy
- Provides smooth flow and bead
- Extended, rigid nozzle gives pinpoint control
- Patented vertically-actuated valve design eliminates clogging
- Product flow is easily regulated without finger fatigue
- Permatex® branded cushion-grip shows you have chosen the best



## Permatex® Gasket Makers

Product	Item Number	Color	Maximum Gap Fill	Typical Use	Temperature Range	Flange Type	Cure Type	Specific Gravity
<b>Permatex® the Right Stuff® Gasket Maker</b>	25224, 29208, 85224, 33694	Black	0.25"	High adhesion, instant seal	-75° to 450°F (-59° to 232°C), 500°F (260°C) intermittent	Rigid or Flexible	Elastomeric Rubber	1.31
<b>Permatex® Ultra Black® Maximum Oil Resistance Gasket Maker</b>	82180, 82080, 85080, 24105	Metallic Black	0.25"	Increased oil resistance, noncorrosive	-65° to 400°F (-54° to 204°C), 500°F (260°C) intermittent	Rigid or Flexible	Silicone (Oxime)	1.26
<b>Permatex® Ultra Copper® Maximum Temperature RTV Silicone Gasket Maker</b>	81878, 82751	Metallic Copper	0.25"	High temperature, noncorrosive	-65° to 600°F (-54° to 316°C), 700°F (371°C) intermittent	Rigid or Flexible	Silicone (Oxime)	1.05
<b>Permatex® Ultra Blue® RTV Silicone Gasket Maker</b>	81724, 85519, 81725	Metallic Blue	0.25"	Increased oil resistance, noncorrosive	-65° to 400°F (-54° to 204°C), 500°F (260°C) intermittent	Rigid or Flexible	Silicone (Oxime)	1.30
<b>Permatex® Ultra Grey® Gasket Maker</b>	82194, 82195	Metallic Grey	0.25"	High durometer for more rigid flanges	-65° to 450°F (-54° to 232°C), 500°F (260°C) intermittent	Rigid or Flexible	Silicone (Oxime)	1.50
<b>Permatex® Sensor-Safe Blue RTV Silicone Gasket Maker</b>	80022, 81860, 80628	Blue	0.25"	General-purpose sealing	-65° to 400°F (-54° to 204°C), 500°F (260°C) intermittent	Rigid or Flexible	Silicone (Acetoxyl)	1.30
<b>Permatex® High-Temp Red RTV Silicone Gasket Maker</b>	81160, 81915, 85915, 81409	Red	0.25"	High temperature general-purpose sealing	-65° to 600°F (-54° to 316°C), 650°F (343°C) intermittent	Rigid or Flexible	Silicone (Acetoxyl)	1.05
<b>Permatex® Anaerobic Flange Sealant</b>	51531, 51580	Dark Purple	0.010" (0.050" primed)	For flexible applications	-65° to 300°F (-54° to 149°C)	Rigid	Anaerobic	1.10
<b>Permatex® Anaerobic Gasket Maker</b>	51813, 51845	Red	0.010" (0.050" primed)	For all metals including aluminum flanges	-65° to 300°F (-54° to 149°C)	Rigid	Anaerobic	1.13

### The Right Stuff® Application Instructions

1. Clean and dry parts.
2. Apply a continuous bead of the Right Stuff® to one surface, surrounding all bolt holes.
3. Assemble parts within 5 minutes, tightening bolts to recommended torque levels. Material will fill any surface imperfection. Equipment can be returned to service immediately. No waiting.





## Ultra Series


**Permatex® the Right Stuff®  
Gasket Maker**


Heavy-bodied, black, elastomeric rubber provides instant seal. Superior flexibility and adhesion accommodates joint movement. Excellent oil resistance. Noncorrosive. Low odor. Low volatility. Temperature range of -75°F to 450°F (-59°C to 232°C) continuous, 500°F (260°C) intermittent. Not recommended for use on parts that will be in contact with gasoline.

Item #	Container Size	Canada
25224	7 oz Automatic Tube®	
85224	7.5 oz PowerBead™ can	26015
29208	5 oz cartridge	30874
33694	10.1 fl oz cartridge	33694
29247	short caulking gun	29247



Canada Canadian part numbers

**Permatex® Ultra Black® Gasket Maker**

Fast-curing formula. Sensor-safe, low odor, noncorrosive. Fills gaps of up to 0.25" when fully cured. Meets performance specs of OE silicone gaskets. Retains high flexibility, oil resistant properties through use of a patented adhesion system. Temperature range -65°F to 400°F (-54°C to 204°C) continuous, 500°F (250°C) intermittent. Resists common fluids and excessive vibration.

Item #	Container Size	Canada
82180	3.35 oz tube, carded	59803
82080	8.75 oz Automatic Tube®	
85080	9.5 oz PowerBead™ can	85080
24105	13 oz cartridge	59813

**Permatex® Ultra Grey® Gasket Maker**

Designed for high torque applications requiring a unique RTV gasket. Fills gaps of up to 0.25" when fully cured. Low odor, noncorrosive. Outstanding oil and coolant resistance. Temperature range -65°F to 450°F (-54°C to 232°C) continuous, 500°F (250°C) intermittent. Resists common fluids and excessive vibration.

Item #	Container Size	Canada
82194	3.5 oz tube, carded	18572
82195	13 oz cartridge	82195

**Permatex® Ultra Copper®  
RTV Silicone Gasket Maker**

Premium silicone designed to provide reliable, tough, flexible formed-in-place gaskets for mechanical assemblies. Temperature range -65°F to 600°F (-54°C to 316°C) continuous, 700°F (371°C) intermittent.

Item #	Container Size	P/N	Canada
81878	3 oz tube, carded	101BR	17914
82751	300 ml cartridge	101C	82751

**Permatex® Ultra Blue®  
RTV Silicone Gasket Maker**


Fills gaps up to 0.25" when fully cured. Sensor-safe, low odor, noncorrosive. Outstanding oil resistance and joint movement values. Eight times more flexible than cork/composite gaskets; three times more oil resistant than conventional silicones. Temperature range -65°F to 400°F (-54°C to 204°C) continuous, 500°F (250°C) intermittent. Resists common fluids and excessive vibration.

Item #	Container Size	P/N	Canada
81724	3.35 oz tube, carded	77BR	81805
85519	9.5 oz PowerBead™ can		85519
81725	13 oz cartridge	77C	17359





### Permatex® Sensor-Safe Blue RTV Silicone Gasket Maker

The original Permatex® blue makes reliable "formed-in-place" gaskets that resist shrinking, cracking and migrating. Product cures to a strong, flexible rubber that seals flanges against leakage and resists oil and other shop fluids. Coat pre-cut gaskets to increase reliability. Temperature range -65°F to 400°F (-54°C to 204°C) continuous, 500°F (250°C) intermittent. Low volatility. Fills gaps to 0.25" when fully cured.

Item #	Container Size	P/N	🇨🇦
80022	3 oz tube, carded	6BR	80506
81860	7.25 oz Automatic Tube®	6MA	
80628	12.9 oz cartridge	6C	80580

### Permatex® High-Temp Red RTV Silicone Gasket Maker

Formulated for high-temp applications. It replaces almost any cut gasket by making reliable "formed-in-place" gaskets that resist cracking, shrinking and migrating caused by thermal cycling. Coat pre-cut gaskets to increase reliability. Temperature range -65°F to 600°F (-54°C to 316°C) continuous, 650°F (343°C) intermittent. Fills gaps to 0.25" when fully cured. MIL-A-46106 B, Type 1.

Item #	Container Size	P/N	🇨🇦
81160	3 oz tube, carded	26BR	81311
81915	7.25 oz Automatic Tube®		
85915	7.25 oz PowerBead™ can		85915
81409	11 oz cartridge	26C	81312



For Technical Information or information on where to buy Devcon® and Permatex® products, call 1-800-933-8266 or visit [www.devcon.com](http://www.devcon.com)

## Anaerobic Gasket Makers

### Permatex® Anaerobic Gasket Maker



Ideal for on-the-spot and emergency repairs, or when a conventional gasket is out of stock. This single component, thixotropic gasket maker cures rapidly for a medium strength, solvent resistant seal that resists temperatures up to 300°F (149°C) and fills gaps to 0.050" (primed). Can be used on a variety of metal surfaces including aluminum. Parts disassemble easily even after extended service.

Item #	Container Size	🇨🇦
51813	50 ml tube, carded	19550
51845	300 ml cartridge	51845

### Permatex® Anaerobic Flange Sealant

Flexible gasketing material ideal for use on rigid, machined flanges. Withstands temperatures to 300°F (149°C). Fills gap of 0.050" (primed) and eliminates the need for preformed gaskets. Ideal for flanges that move in service.

Item #	Container Size	🇨🇦
51531	50 ml tube	17369
51580	300 ml cartridge	51580



🇨🇦 Canadian part numbers



Because ITW Devcon offers a full range of high-performance adhesives, we will never force your application to fit our technology. Through our national network of distributors, we will work with you to assess your adhesive requirements. Our experienced application specialists will then recommend a total adhesives solution including the best adhesive for your needs, along with the right dispensing system. If desired, we will also supply bonded samples and test results, as well as training and support.



- ▼ High-strength, fast-curing epoxies
- ▼ Advanced methacrylates for bonding plastics, composites, metals and dissimilar substrates
- ▼ Instant-curing cyanoacrylates that eliminate the need for fixturing
- ▼ Chemical-resistant, MIL-SPEC threadlockers, retaining compounds and pipe sealants
- ▼ UV adhesives with unlimited open times and rapid light curing
- ▼ Specialty adhesives custom engineered for specialized applications

All these adhesives are available in a variety of package sizes including convenient, no-waste, mix-as-dispensed dual cartridges.



## OEM Adhesive Selector Guide

Key: ● excellent Choice    ◐ Good Choice    ○ Requires Metal Prep 90™    Blank - Not Recommended

	OEM Material	One Minute™ Epoxy Gel	5 Minute™ Epoxy / Epoxy Gel	Dev-Thane™ Adhesives	10 Minute™ Epoxy	2 Ton® Clear Epoxy	Epoxy Plus™ 25	HP 250	Plastic Welder™	Plastic Welder™ II	Composite Welder™ FS	Metal Welder™ Adhesives	ZipGrip® Adhesives	UV Adhesives
METAL	Aluminum <sup>1</sup>	●	●	●	●	●	●	●	○	○	○	●	◐	●
	Brass	●	●	●	●	●	●	●	○	○	○	●	◐	●
	Cast Iron	●	●	●	●	●	●	●	○	●	○	●	◐	◐
	Copper	◐	●	●	●	●	●	●	○	○	○	●	◐	●
	Ferrite	◐	◐	●	◐	◐	●	●	●	●	●	●	◐	●
	Painted metals	◐	◐	●	◐	◐	◐	◐	◐	◐	◐	●	◐	●
	Plated metals			●	◐		◐	◐		◐	◐	◐	◐	
	Sheet metal			●	◐		●	●	◐	●	◐	●		
	Stainless steel <sup>1</sup>	●	●	●	●	●	●	●	○	○	○	●	◐	
	Cold rolled steel	●	●	●	●	●	●	●	●	●	●	●	●	●
	Galvanized			●			◐	◐			○			◐
PLASTIC	ABS			◐	◐		◐		●	●	●	●	◐	●
	Acrylics (PMMA)			◐	◐		●	◐	●	●	●	●	◐	●
	Fiberglass			◐	◐	◐	●	●	●	●	●	●	◐	
	Gel coats			●			●	●	◐	◐	●	●		●
	Epoxy	◐	◐		●	◐	●	●	●	●	●	●	◐	
	Polyamides (Nylon) (6,6/6)						◐	◐		◐	○	○	◐	
	Polyesters (PET/PBA blends)						●	◐	●	●	●	●	●	
	Polycarbonate	●					◐	◐	●	●	●	●	◐	●
	PPO and PPO blends									●	●	●	◐	
	Vinyls (PVC)	◐	◐		◐	◐	◐	◐	●	●	●	●	●	
	RIM urethanes									●	●	●		
	SMCs						◐	◐			●	●		
	Styrene resins						◐	◐	◐	◐	●	◐	●	●
	Polyacrylate						◐	◐		●	●	●		
	Polyurea									●	◐	◐	◐	
	Cellulosics (CAL, CAB, CAP)									●	◐	◐	◐	
	Polysulfone									◐	●	●	◐	
	Phenolics						◐	●	●	●	●	●	◐	◐
	Laminates						◐	●	●	●	●	●	●	
WOOD	Wood (hard and soft)	●	●	●	●	●	●	●	◐	◐	◐	◐	◐	●
	Plywood	●	●	●	●	●	●	●	◐	◐	◐	◐	◐	
	Particle board	●	●	●	●	●	●	●	◐	◐	◐	◐	◐	
OTHER	Brick	●	●	●	●	●	●	●	●	●	●	●		
	Concrete	●	●	●	●	●	●	●	●	●	●	●		
	Rubber			●									●	
	Honeycomb	◐	◐	●	◐	◐	●	●	●	●	●	●		
	Ceramics	◐	◐	●	◐	◐	●	●	●	●	◐	◐	◐	◐
	Glass			●										●

NOTES: <sup>1</sup> Use of Metal Prep 90™ primer/cleaner is recommended on these metals prior to bonding with Plastic Welder™, Plastic Welder™ II and Composite Welder™ FS.





## 2-Part Structural Epoxy Adhesives

Devcon advanced epoxy adhesives are used for structural bonding, potting and encapsulating, and come in a variety of cure times and package sizes.

### Devcon® 5 Minute® Epoxy

Rapid-curing, general-purpose adhesive/encapsulant.

Item #	Container Size	Dispenser	Nozzle
14250	25 ml Dev-Tube™	—	—
14270	50 ml cartridge	14280 (manual)	14285
14210	2.5 oz	—	—
DA051	400 ml cartridge	14410 (manual)	14292
14200	15 oz	—	—
14630	9 lb	—	—

### Devcon® 5 Minute® Epoxy Gel

Thixotropic, nonmigrating gel adhesive with excellent gap filling properties.

Item #	Container Size	Dispenser	Nozzle
14240	25 ml Dev-Tube™	—	—
14265	50 ml cartridge	14280 (manual)	14285
DA052	400 ml cartridge	14410 (manual)	14292

### Devcon® One Minute™ Epoxy Gel

Lightning fast curing gel adhesive for filling gaps, cracks and holes.

Item #	Container Size	Dispenser	Nozzle
14277	50 ml cartridge	14280 (manual)	14285



### Devcon® 10 Minute™ Epoxy

Flexible epoxy provides excellent adhesion to metals and superior peel, impact and chemical resistance.

Item #	Container Size	Dispenser	Nozzle
14251	50 ml cartridge (clear)	14280 (manual)	14285
14255	50 ml cartridge (black)	—	—

### Devcon® 2 Ton® Clear Epoxy

Extremely strong, medium-cure, water-resistant adhesive.

Item #	Container Size	Dispenser	Nozzle
14310	25 ml Dev-Tube™	—	—
14260	50 ml cartridge	14280 (manual)	14285
14355	400 ml cartridge	14410 (manual)	14292
14360	9 lb	—	—

### Devcon® Epoxy Plus™ 25

Rubber-toughened structural adhesive with superior peel, impact and fatigue resistance.

Item #	Container Size	Dispenser	Nozzle
14278	50 ml cartridge	14280 (manual)	14285
14350	400 ml cartridge	14410 (manual)	14293

### Devcon® HP 250

High-performance, toughened structural adhesive with outstanding environmental, impact and chemical resistance.

Item #	Container Size	Dispenser	Nozzle
14315	50 ml cartridge	—	—
14415	400 ml cartridge	14410 (manual)	14292



🇨🇦 Canadian part numbers are the same as US part numbers.





Physical Properties	5 Minute® Epoxy	5 Minute® Epoxy Gel	One Minute™ Epoxy Gel	10 Minute® Epoxy		2 Ton® Clear Epoxy	Epoxy Plus™ 25	HP 250
Color	Clear	Opaque	Clear	Black	Clear	Clear	Grey	Straw
Mix ratio <i>resin:hardener</i>	1:1	1:1	1:1	1:1	1:1	1:1	1:1	2:1
Mixed viscosity <i>cP</i>	10,000	Gel	70,000	90,000	80,000	8,000	70,000	105,000
Working time <sup>1</sup> <i>minutes</i>	3 ~ 6	4 ~ 7	45 sec	10	10	8 ~ 12	25	65
Fixture time <sup>2</sup> <i>minutes</i>	10 ~ 15	10 ~ 15	1	20	20	30 ~ 35	3.5 hours	5 hours
Functional cure <i>hours</i>	1.5	0.75 ~ 1	0.5 ~ 0.75	1.5	1.5	2	24	24
Adhesive tensile lap shear (ASTM D1002) <sup>3</sup> <i>psi</i>	1,900 <sup>4</sup>	2,500	1,600 <sup>4</sup>	2,400	2,400	2,250	2,750	3,200
Tensile elongation <i>%</i>	5	1	1	5	5	1	20	25
Peel strength <i>pli</i>	2 ~ 3	2 ~ 3	2 ~ 3	20 ~ 25	20 ~ 25	2 ~ 3	20 ~ 25	35 ~ 40
Impact resistance <i>ft-lb / in<sup>2</sup></i>	5.5	6.5	4.5	10	10	6.5	10	12
Maximum dry service temperature <i>°F</i>	-40 ~ 200	-40 ~ 200	-40 ~ 200	-67 ~ 200	-67 ~ 200	-40 ~ 200	-40 ~ 200	-67 ~ 250

NOTES: <sup>1</sup> The maximum allowable time to mate and position parts after mixing and application of the adhesive. After this interval, parts must not be disturbed. <sup>2</sup> The time required for the adhesive to generate sufficient bond strength to allow parts to be handled without deformation of the bond line. <sup>3</sup> All tensile strength data per ASTM D1002 on grit-blasted steel, bond line thickness of 0.010". <sup>4</sup> Bond line thickness of 0.005".

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance							
<b>ACIDS</b>							
Acetic 10%	○	○	○	○	○	○	○
Hydrochloric 10%	○	○	○	○	○	○	○
Sulfuric 10%	○	○	○	○	○	○	○
<b>ALCOHOLS</b>							
Glycol	○	○	○	○	○	○	○
Isopropanol	○	○	○	○	○	○	○
Methanol	○	○	○	○	○	○	○
<b>KETONES</b>							
Acetone	○	○	○	○	○	○	○
Methyl ethyl ketone	○	○	○	○	○	○	○
<b>ALKALIS</b>							
Ammonium hydroxide 20%	○	○	○	○	○	○	○
Sodium hydroxide 10%	○	○	○	○	○	○	○
<b>HYDROCARBONS</b>							
Gasoline (unleaded)	●	●	●	○	●	○	○
Mineral spirits	●	●	●	●	●	●	●
Motor oil	●	●	●	●	●	●	●
<b>SALTS</b>							
Sodium chloride	○	○	○	○	○	○	○
Trisodium phosphate	○	○	○	○	○	○	○



**Devcon® Food Grade Pot & Seal**

An epoxy potting compound acceptable for meat and poultry plants. It is ideal for bonding filter screens to frames.

Item #	Container Size	Dispenser	Nozzle
DA999	400 ml cartridge	15043 (manual)	15047

**Devcon® 5-Minute® I-FR**

Flame retardant, non-brominated, antimony free, 5-Minute® 2-component epoxy paste. Ideal for applications requiring a self-extinguishing structural epoxy system. Meets UL94V-0 and FAR 25.853 [a], and is RoHS compliant.

Item #	Container Size	Dispenser	Nozzle
14272	50 ml cartridge	14280 (manual)	14285

**Devcon® 10-Minute™ I-FR**

Flame retardant, non-brominated, antimony free, 10-Minute™ epoxy with impact resistance. 2-component epoxy paste. Non-sag, structural epoxy for potting inserts and edge sealing. Meets UL94V-0 and FAR 25.853 [a], and is RoHS compliant.

Item #	Container Size	Dispenser	Nozzle
14258	50 ml cartridge	14280 (manual)	14285

Physical Properties	Food Grade Pot & Seal	Flame Retardant	
		5-Minute® I-FR	10-Minute™ I-FR
Color	White	White	White
Mix ratio <i>resin:hardener</i>	4:1	1:1	1:1
Mixed viscosity <i>cP</i>	100,000	55,000	150,000
Working time <sup>1</sup> <i>minutes</i>	42 @ 75°F	4 - 6	10
Fixture time <sup>2</sup> <i>minutes</i>	10 @ 200°F	10 ~ 15	20 ~ 25
Functional cure <i>hours</i>	25 @ 200°F	1	3
Adhesive tensile lap shear (ASTM D1002) <sup>3</sup> <i>psi</i>	1,980	1,430 <sup>4</sup>	2,700
Tensile elongation <i>%</i>	1	1	5
Peel strength <i>pli</i>	2 ~ 3	2	15
Impact resistance <i>ft-lb/in<sup>2</sup></i>	5.2	5	8
Maximum dry service temperature <i>°F</i>	-40 - 275	-40 - 200	-67 - 200

NOTES: <sup>1</sup> The maximum allowable time to mate and position parts after mixing and application of the adhesive. After this interval, parts must not be disturbed.

<sup>2</sup> The time required for the adhesive to generate sufficient bond strength to allow parts to be handled without deformation of the bond line.

<sup>3</sup> Per ASTM D1002 on grit-blasted steel, bond line thickness of 0.010".

<sup>4</sup> Bond line thickness of 0.005".

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance			
<b>ACIDS</b>			
Acetic 10%	○	○	○
Hydrochloric 10%	○	○	○
Sulfuric 10%	○	○	○
<b>ALCOHOLS</b>			
Glycol	●	○	○
Isopropanol	●	○	○
Methanol	○	○	○
<b>KETONES</b>			
Acetone	○	○	○
Methyl ethyl ketone	○	○	○
<b>ALKALIS</b>			
Ammonium hydroxide 20%	●	○	○
Sodium hydroxide 10%	●	○	○
<b>HYDROCARBONS</b>			
Gasoline (unleaded)	●	●	○
Mineral spirits	●	●	○
Motor oil	●	●	○
<b>SALTS</b>			
Sodium chloride	●	○	○
Trisodium phosphate	●	○	○

🇨🇦 Canadian part numbers are the same as US part numbers.



## Urethane Adhesives

Devcon urethane formulations are primerless adhesives that bond metals, plastic, galvanized metal and other hard-to-bond substrates. They offer rapid curing and exceptional flexibility.



### Devcon® Dev-Thane™ 5

Primerless, fast-setting, two-part urethane adhesive for high-performance bonding of a variety of substrates such as aluminum, steel, ABS, urethane and composites.

Item #	Container Size	Dispenser	Nozzle
14503	50 ml cartridge	14280 (manual)	14285
14500	400 ml cartridge	14410 (manual)	14293

### Devcon® Dev-Thane™ 2

Faster-curing version of Dev-Thane™ 5 with a fixture time of 20 minutes.

Item #	Container Size	Dispenser	Nozzle
14501	50 ml cartridge (light grey)	14280 (manual)	14285
14510	400 ml cartridge (dark grey)	14410 (manual)	14293

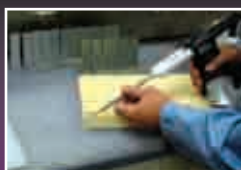
Physical Properties	Dev-Thane™ 2	Dev-Thane™ 5
<b>Color</b>	Light Grey, Dark Grey	Grey
<b>Mix ratio</b> resin: hardener	1:1	1:1
<b>Mixed viscosity</b> cP	100,000	45,000
<b>Fixture time</b> minutes	20	45
<b>Working time</b> minutes	2	5
<b>Peel strength</b> pli	60 ~ 75	60 ~ 75
<b>Functional cure</b> <sup>1</sup> hours	1.5	4
<b>Tensile Elongation</b> %	200	200
<b>Cured hardness</b> (ASTM D2240) Shore D	63	63
<b>Adhesion Tensile Lap Shear</b> (ASTM D1002) psi	2,750	2,750

NOTES: <sup>1</sup> Faster cure times can be achieved by heating.

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance		
<b>ACIDS</b>		
Acetic 10%	○	○
Hydrochloric 10%	●	●
Sulfuric 10%	●	●
<b>ALCOHOLS</b>		
Glycol	○	○
Isopropanol	○	●
Methanol	○	○
<b>KETONES</b>		
Acetone	○	○
Methyl ethyl ketone	○	○
<b>ALKALIS</b>		
Ammonium hydroxide 20%	●	○
Sodium hydroxide 10%	●	●
<b>HYDROCARBONS</b>		
Gasoline (unleaded)	○	●
Mineral spirits	●	●
Motor oil	●	●
<b>SALTS</b>		
Sodium chloride	●	●
Trisodium phosphate	●	●

🇨🇦 Canadian part numbers are the same as US part numbers.



## 2-Part Structural Acrylic Adhesives

Advanced methacrylate adhesives produce tough, flexible bonds on today's hard-to-bond plastics, composites, exotic metals and dissimilar substrates.

### Devcon® Plastic Welder™

Toughened adhesive for high strength load-bearing bonds to engineered plastics, metals, composites, ceramics and dissimilar substrates. Approved under UL 746C Polymeric Adhesive Systems, Electrical Equipment - Component. SAMS listed.

Item #	Container Size	Dispenser	Nozzle
14300	25 ml Dev-Tube™ (straw)	—	—
14320	47 ml cartridge (straw)	14280 (manual)	14285
DA291	47 ml cartridge (white)		
DA290	47 ml cartridge (black)		
14385	400 ml cartridge (straw)	14410 (manual)	14292
DA160	400 ml cartridge (white)		
DA295	400 ml cartridge (black)		
14330	2 liter kit (straw)	—	—
DA033/034	10 gal kit (straw)	—	—
14388/14389	10 gal kit (black)	—	—
DA309/307	100 gal kit (straw)	—	—

### Devcon® Plastic Welder™ II

Formulated for difficult-to-bond engineered plastics such as nylon-based alloys, epoxy composites and modified polyesters.

Item #	Container Size	Dispenser	Nozzle
14340	47 ml cartridge (straw)	14280 (manual)	14285
14390	400 ml cartridge (straw)		

### Devcon® Composite Welder™ FS

Flexible adhesive for bonding composites, thermoplastics and thermosets. Fast fixture and cure times; superior impact and fatigue resistance. Approved under UL 746C Polymeric Adhesive Systems, Electrical Equipment - Component. SAMS listed.

Item #	Container Size	Dispenser	Nozzle
14165	490 ml cartridge (blue green)	Contact Devcon Tech Service	
14166	490 ml cartridge (black)	Contact Devcon Tech Service	
DA461/462	10 gal kit	—	—

### Devcon® Metal Welder™

High-performance structural adhesive formulated to bond a wide range of metals including: aluminum, stainless steel, cold-rolled steel and dissimilar substrates without primers. Approved under UL 746C Polymeric Adhesive Systems, Electrical Equipment - Component. SAMS listed.

Item #	Container Size	Dispenser	Nozzle
14366	35 ml cartridge	14280 (manual)	14285
14367	380 ml coax cartridge	14409 (manual)	14293

### Devcon® Metal Welder™ II

Longer open time version of Metal Welder™ adhesive for bonding large metal parts and assemblies.

Item #	Container Size	Dispenser	Nozzle
14363	380 ml coax cartridge	14409 (manual)	14293

### Devcon® Metal Prep 90™

Primer/conditioner improves bond durability on aluminum or stainless steel surfaces.

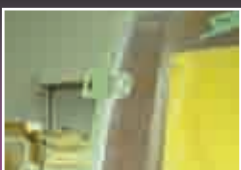
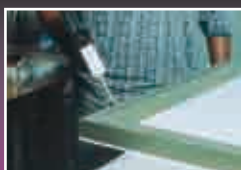
Item #	Container Size	Dispenser	Nozzle
19650	1 pt	—	—



All Devcon  
Methacrylate Adhesives  
Are GreenGu Ar D® Certified



🇨🇦 Canadian part numbers are the same as US part numbers.





Physical Properties	Plastic Welder™		Plastic Welder™ II	Composite Welder™ FS	Metal Welder™	Metal Welder™ II
<b>Color</b>	Straw, Black	White	Straw	Blue Green, Black	Grey / Beads	Grey / Beads
<b>Mix ratio</b> <small>resin:hardener</small>	1:1	1:1	1:1	10:1	10:1	10:1
<b>Mixed viscosity</b> <small>cP</small>	50,000 <sup>4</sup>	50,000 <sup>4</sup>	56,000 <sup>4</sup>	120,000 <sup>4</sup>	90,000 <sup>4</sup>	90,000 <sup>4</sup>
<b>Working time</b> <sup>1</sup> <small>minutes</small>	4 ~ 6	2 ~ 3	15 ~ 20	4 ~ 8	4 ~ 6	12 ~ 16
<b>Fixture time</b> <sup>2</sup> <small>minutes</small>	10 ~ 15	8 ~ 10	30 ~ 35	10 ~ 15	20 ~ 25	45 ~ 55
<b>Functional cure</b> <small>hours</small>	0.75 ~ 1	0.75 ~ 1	2 ~ 4	0.75 ~ 1	1 ~ 2	4
<b>Adhesive tensile lap shear</b> <sup>3</sup> (ASTM D1002) <small>psi</small>	3,500	3,500	3,000	2,260	2,450	2,020
<b>Tensile elongation</b> %	15 ~ 25	15 ~ 25	5 ~ 15	100 ~ 125	30 ~ 60	40 ~ 60
<b>Peel strength</b> <small>pli</small>	35 ~ 40	35 ~ 40	15 ~ 20	60 ~ 65	30 ~ 40	30 ~ 40
<b>Impact resistance</b> <small>ft-lb / in<sup>2</sup></small>	22	22	17	22	>20	>20
<b>Maximum dry service temperature</b> <small>°F</small>	-67 ~ 250	-67 ~ 250	-67 ~ 250	-40 ~ 250	-67 ~ 200	-67 ~ 200

NOTES: <sup>1</sup> The maximum allowable time to mate and position parts after mixing and application of the adhesive. After this interval, parts must not be disturbed.

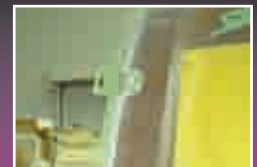
<sup>2</sup> The time required for the adhesive to generate sufficient bond strength to allow parts to be handled without deformation of the bond line.

<sup>3</sup> All tensile strength data per ASTM D1002 on grit-blasted steel, bond line thickness of 0.010".

<sup>4</sup> Thixotropic gel.

Key: ● Excellent ○ Very Good ○ Fair ○ Poor

Chemical Resistance					
<b>ACIDS</b>					
Acetic 10%	○	○	○	○	○
Hydrochloric 10%	○	○	○	○	○
Sulfuric 10%	●	○	○	○	○
<b>ALCOHOLS</b>					
Glycol	○	○	○	○	○
Isopropanol	●	●	●	●	●
Methanol	○	○	○	○	○
<b>KETONES</b>					
Acetone	○	○	○	○	○
Methyl ethyl ketone	○	○	○	○	○
<b>ALKALIS</b>					
Ammonium hydroxide 20%	○	○	○	○	○
Sodium hydroxide 10%	○	●	○	○	○
<b>HYDROCARBONS</b>					
Gasoline (unleaded)	○	○	○	○	○
Mineral spirits	○	○	○	○	○
Motor oil	○	○	○	○	○
<b>SALTS</b>					
Sodium chloride	○	○	○	○	○
Trisodium phosphate	○	○	○	○	○



## Permater<sup>®</sup> ZipGrip<sup>®</sup> Instant Adhesives

From a world leader in cyanoacrylate technology, Permater<sup>®</sup> ZipGrip<sup>®</sup> Instant Adhesives are designed to handle the full range of OEM applications. This comprehensive line includes formulations for even the most specialized needs.

### Permater<sup>®</sup> ZipGrip<sup>®</sup> General Purpose Instant Adhesives

General Purpose formulations for bonding metals, plastics and rubber in all combinations. Gels are ideal for vertical or inverted surfaces.

Item #	Container Size	P/N	🇨🇦
70144	14 g bottle	GPE 3	70144
70145	2 g tube	GPE 3	70145
70213	1/3 oz bottle	GPE 15	70213
70350	1 oz bottle	GPE 30	70350
70450	1 oz bottle	GPE 100	70450



### Permater<sup>®</sup> ZipGrip<sup>®</sup> Toughened Instant Adhesives

Toughened ethyl versions are modified with elastomeric compounds to improve impact, peel and general toughness of cyanoacrylates. They also exhibit higher temperature and moisture resistance than standard formulas.

Item #	Container Size	P/N	🇨🇦
72161	1 lb bottle	TE 1000	72161
72250	1 oz bottle	TE 2400	72250
72261	1 lb bottle	TE 2400	72261

### Permater<sup>®</sup> ZipGrip<sup>®</sup> General Purpose Instant Adhesives

Product	Item Number	Container Size	Viscosity	Color	Type	Gap Filling	Adhesive Tensile Shear	Service Temperature	Cure Speed Steel-Plastic-Rubber
<b>GPE 3<sup>1</sup></b>	70144 70145	14 g bottle 2 g tube	3 cP	Clear	Ethyl	0.003"	3,200 psi	-65 to 200°F	5-10 / 3-5 / <2 sec
<b>GPE 15<sup>1</sup></b>	70213	1/3 oz bottle	15 cP	Clear	Ethyl	0.005"	3,200 psi	-65 to 200°F	5-10 / 4-10 / <3 sec
<b>GPE 30<sup>1</sup></b>	70350	1 oz bottle	30 cP	Clear	Neomer Ethyl	0.004"	3,200 psi	-65 to 200°F	5-12 / 5-13 / <6 sec
<b>GPE 100<sup>2</sup></b>	70450	1 oz bottle	100 cP	Clear	Ethyl	0.004"	3,200 psi	-65 to 200°F	10-20 / 10-20 / <5 sec

### Permater<sup>®</sup> ZipGrip<sup>®</sup> Toughened Instant Adhesives

Product	Item Number	Container Size	Viscosity	Color	Type	Gap Filling	Adhesive Tensile Shear	Service Temperature	Cure Speed Steel-Plastic-Rubber
<b>TE 1000<sup>3</sup></b>	72161	1 lb bottle	1,000 cP	Clear	Ethyl	0.008"	3,700 psi	-65 to 280°F	25-40 / 25-50 / 20-50 sec
<b>TE 2400<sup>3</sup></b>	72250 72261	1 oz bottle 1 lb bottle	2,400 cP	Clear	Ethyl	0.009"	3,700 psi	-65 to 280°F	40-70 / 25-50 / 25-50 sec

NOTES: <sup>1</sup> Commercial Item Standard A-A-3097, Type II, Class 1  
<sup>3</sup> Commercial Item Standard A-A-3097, Type II, Class 3

<sup>2</sup> Commercial Item Standard A-A-3097, Type II, Class 2

🇨🇦 Canadian part numbers



## Manual Applicator Guns and Nozzles

Manual applicator guns with static nozzles mix as they dispense, eliminating premixing and ensuring precise bead control.

### Devcon® 50 ml Mark 5™ Dispensing System

Manual dispensing guns and custom-designed static mixing nozzles for 1:1 and 10:1 50 ml systems.

Item #	Dispensing Guns
14280	Manual (1:1 and 10:1 ratio)
Mixing Nozzles	
14285	Ø .25" (1:1, 2:1 and 10:1 ratio)

### Devcon® 380 ml Coaxial Dispensing System

Manual dispensing guns and custom designed static mixing nozzles for 10:1 380 ml coaxial systems.

Item #	Dispensing Guns
14409	Manual (10:1 ratio)
Mixing Nozzles	
14293	Ø .315" (10:1 ratio)

### Devcon® 400 ml Dispensing System

Manual dispensing guns and custom-designed static mixing nozzles for 1:1 400 ml systems and 4:1 400 ml systems.

Item #	Dispensing Guns
14410	Manual (1:1 and 2:1 ratio)
15043	Manual (4:1 ratio)
Mixing Nozzles	
14291	Ø .250" (1:1 ratio)
14293	Ø .315" (1:1 ratio)
14292	Ø .395" (1:1 and 10:1 ratio)
15047	Ø .394" (4:1 ratio)



🇨🇦 Canadian part numbers are the same as US part numbers.

### Devcon® 490 ml Dispensing System

Manual dispensing gun and custom-designed static mixing nozzles for 10:1 490 ml systems.

Item #	Dispensing Guns
Contact Devcon Tech Service	
Mixing Nozzles	
14287	Ø .375" (10:1 ratio)

## Mix Nozzle Selector Guide

Item Number	Element	Product Compatibility
<b>14285</b> (for Mark 5™ 1:1, 2:1 and 10:1 50 ml gun)	20 element 6.35 mm or Ø .250"	One Minute™, 5 Minute®, 2 Ton®, Epoxy Plus™ 25, HP 250, 5 Minute® Gel, Plastic Welder™, Plastic Welder™ II, Metal Welder™
<b>14287</b> (for 490 ml cartridge with 10:1 manual or pneumatic gun)	24 element 9 mm or Ø .375"	Composite Welder™ FS
<b>14291</b> (for 400 ml pneumatic gun only)	18 element 6 mm or Ø .250"	Smaller diameter for less waste for methacrylates / Plastic Welder™, Plastic Welder™ II
<b>14292</b> (for 400 ml 1:1 manual or pneumatic gun)	18 element 10 mm or Ø .395"	One Minute™, 5 Minute®, 2 Ton®, Epoxy Plus™ 25, HP 250, 5 Minute® Gel, Plastic Welder™, Plastic Welder™ II, Food Grade Pot & Seal
<b>14293</b> (for 400 ml 1:1 manual or pneumatic gun) (for 380 ml 10:1 Coaxial manual or pneumatic gun)	32 element 8 mm or Ø .315"	Epoxy Plus™ 25, Cable Cast, Metal Welder™, Metal Welder™ II, Dev-Thane™ 5
<b>15047</b> (for 400 ml 4:1 manual or pneumatic gun)	24 element 10 mm or Ø .394"	Flexane® FC Rubber Repair Liquid, Flexane® FC Rubber Repair, Edge & Seal (T-35)



## Devcon® / Permatex® Mil-Spec, UL and Other Government Specifications

Product Category	Specification	Product	Part #	Size
Devcon® Epoxy Adhesives	FAR 25.853 [a]	5-Minute® I-FR	14272	50 ml cartridge
		10-Minute® I-FR	14258	50 ml cartridge
	RoHS	5-Minute® I-FR	14272	50 ml cartridge
		10-Minute® I-FR	14258	50 ml cartridge
Devcon® Methacrylate Adhesives	UL 746C Polymeric Adhesive Systems, Electrical Equipment Component	Plastic Welder™	14300	25 ml Dev-Tube™
			14320	47 ml cartridge
			14385	400 ml cartridge
			14330	2 liter kit
			DA033/34	10 gal kit
			DA309/307	100 gal kit
		Composite Welder™ FS	14165	490 ml cartridge
		Metal Welder™	14366	35 ml cartridge
			14367	380 ml coax cartridge
Permatex® ZIP GRIP® Instant Adhesives	A-A-3097, Type II, Class 1	GPE 3 Wicking	70144	14 g bottle
		GPE 15 Rubber Bonder	70145	2 g tube
			70213	1/3 oz bottle
		GPE 30 All Purpose	70350	1 oz bottle
	A-A-3097, Type II, Class 2	GPE 100 All Purpose- Medium Viscosity	70450	1 oz bottle
		TE 1000 Gap Filling	72161	1 lb bottle
	A-A-3097, Type II, Class 3	TE 2400 Gap Filling- Hi Temp	72250	1 oz bottle
			72261	1 lb bottle
Permatex® Threadlockers Liquids	S-46163A, Type II, Grade M	Low Strength Threadlocker PURPLE	22250	50 ml bottle
			22225	250 ml bottle
	S-46163A, Type II, Grade N	Medium Strength Threadlocker BLUE	24210	10 ml bottle
			24250	50 ml bottle
			24225	250 ml bottle
	S-46163A, Type II, Grade O	Permanent Strength Threadlocker RED	26210	10 ml bottle
			26250	50 ml bottle
			26225	250 ml bottle
			26201	1 Liter bottle
	S-46163A, Type I, Grade K	High Strength Threadlocker RED	27110	10 ml bottle
			27150	50 ml bottle
			27125	250 ml bottle
	S-46163A, Type I, Grade L	Large Diameter Threadlocker RED	27750	50 ml bottle
			27725	250 ml bottle
	S-46163A, Type III, Grade R	Penetrating Grade Threadlocker GREEN	29050	50 ml bottle
			29025	250 ml bottle
Permatex® Retaining Compounds	R-46082B, Type I	Bearing Mount for Close Fits	60950	50 ml bottle
			60925	250 ml bottle
	R-46082B, Type II	High Temp Sleeve Retainer	64050	50 ml bottle
Devcon® Silicone Adhesive Sealants	A-46106A	Silite® Silicone RTV-Clear	17100	3 oz cartridge
			17150	10.3 oz cartridge
		Silite® Silicone RTV-White	17140	10.3 oz cartridge
			17130	10.3 oz cartridge
Permatex® Silicone Adhesive Sealants	A-46106B, Type I	Clear RTV Silicone Adhesive Sealant	80050	3 oz tube
			81913	7.25 oz Automatic Tube®
			85913	7.25 oz PowerBead™ can
			80855	11 oz cartridge
			81160	3 oz tube
			81915	7.25 oz Automatic Tube®
		High Temp Red RTV Silicone Gasket	85915	7.25 oz PowerBead™ can
			81409	11 oz cartridge
			81158	3 oz tube
		Black Silicone Adhesive Sealant	81173	12.9 oz cartridge

Product Category	Specification	Product	Part #	Size
Devcon® Metal Repair Compounds	MIL-PRF-24176C, Type I	Plastic Steel® Putty (A)	10110	1 lb
			10120	4 lb
			10130	25 lb
		Titanium Putty	10760	1 lb
			10770	2 lb
		Ceramic Repair Putty	11700	3 lb
	MIL-PRF-24176C, Type II	Aluminum Putty (F)	10610	1 lb
			10620	3 lb
	MMM-A-1754	Plastic Steel® Liquid (B)	10210	1 lb
			10220	4 lb
		Aluminum Liquid (F-2)	10230	25 lb
			10710	1 lb
Permatex® Anti-Seize Lubricants	A-907	Anti-Seize Lubricant	81343	1 oz tube
			80071	4 oz brush-top bottle
			80078	8 oz brush-top bottle
			81464	12 oz aerosol can, 8.5 oz net wt
			80208	16 oz bottle
		Copper Anti-Seize	09128	8 oz brush-top bottle
	Δ NFPA Fire Code 30B: Level 3	Anti-Seize Lubricant	31163	16 oz brush-top bottle
			81343	1 oz tube
			80071	4 oz brush-top bottle
			80078	8 oz brush-top bottle
			81464	12 oz aerosol can, 8.5 oz net wt
			80208	16 oz bottle
Permatex® Gasket Sealants	S-45180D, Type I	Form-A-Gasket® No. 1 Sealant	80003	11 oz tube
	S-45180D, Type II	Form-A-Gasket® No. 2 Sealant	80015	1.5 oz tube
			80016	3 oz tube
	S-45180D, Type III	Form-A-Gasket® No. 3 Sealant	80011	11 oz tube
			80017	16 oz bottle

## Devcon® / Permatex® ABS Type Approved Products

Product Category	ABS	Product	Part #	Size
Devcon® Urethane Repair Compounds	ABS	Flexane Brushable	15350	1 lb
Devcon® Metal Repair Putties	ABS	Plastic Steel® Putty (A)	10110	1 lb
			10120	4 lb
			10130	25 lb
		Plastic Steel® 5 Minute® Putty (SF)	10240	1 lb
		Aluminum Putty (F)	10610	1 lb
			10620	3 lb
		Titanium Putty	10760	1 lb
			10770	2 lb
		Stainless Steel Putty (ST)	10270	1 lb
		Bronze Putty (BR)	10260	1 lb
Devcon® Metal Repair Liquids/ Wearing Compounds	ABS	Ceramic Repair Putty	11700	3 lb
			10210	1 lb
			10220	4 lb
		Plastic Steel® Liquid (B)	10230	25 lb
			10710	1 lb
			10720	3 lb
		Aluminum Liquid (F2)	11760	2 lb
			11762	12 lb
		Brushable Ceramic Red	11765	2 lb
		Brushable Ceramic Blue	11767	12 lb
		Brushable Ceramic White	11770	2 lb





Devcon® / Permatex® NSF Registered Products

Product Category	NSF Approval	Product	Part #	Size
Permatex® Liquid Threadlockers	P1	Low Strength Threadlocker PURPLE	22250	50 ml bottle
			22225	250 ml bottle
			24210	10 ml bottle
			24242	36 ml bottle
		Medium Strength Threadlocker BLUE	24250	50 ml bottle
			24225	250 ml bottle
			26210	10 ml bottle
			26242	36 ml bottle
		Permanent Strength Threadlocker RED	26250	50 ml bottle
			26225	250 ml bottle
			26201	1 Liter bottle
			29050	50 ml bottle
Permatex® Gel Threadlockers	P1	Medium Strength Threadlocker BLUE	24010	10 g Gel Twist™ carded
		High Strength Threadlocker RED	27010	10 g Gel Twist™ carded
Permatex® Thread Sealants	P1	High Performance Thread Sealant	56521	50 ml tube, carded
Permatex® Retaining Compounds	P1	Bearing Mount for Relaxed Fits	68050	50 ml bottle
			68025	250 ml bottle
Permatex® Activators	Δ NFPA Fire Code 30B: Level 1	Surface Prep™ Activator for Anaerobic	24163	6 oz aerosol can, 4.5 oz net wt
Permatex® Gasket Makers	P1	ULTRA BLUE® RTV Silicone Gasket Maker	81724	3.35 oz tube, carded
			85519	9.5 oz PowerBead™ can
			81725	13 oz cartridge
		The Right Stuff® Gasket Maker	25224	7 oz Automatic Tube
			29208	5 oz cartridge
			85224	9.5 oz PowerBead™ can
			33694	10.1 fl oz cartridge
		Anaerobic Gasket Maker	51813	50 ml tube, carded
			51845	300 ml cartridge
Devcon® Silicone Adhesive Sealants	NSF / ANSI 51	Silite® Silicone RTV-Clear	17100	3 oz tube
			17150	10.3 oz tube
		Silite® Silicone RTV-White	17140	10.3 oz tube
		Silite® Silicone RTV (High Temp.)	17130	10.3 oz tube
Devcon® Metal Repair Compounds	NSF / ANSI 61	Stainless Steel Putty	10270	1 lb
		Brushable Ceramic (White)	11770	2 lb
Devcon® Flooring Repair	R2	Floor Patch™	13100	10 lb.
			13120	40 lb
		Floor Patch™ FC	13110	10 lb
		Epoxy Coat™ 7000 Non VOC	12710	2 gal

Viscosity (cP)

Viscosity is a measure of a fluid's resistance to flow as compared to water. Viscosity is measured in Centipoise (cP).

Material	Centipoise (cP) @ 70°F <sup>1</sup>
Water	1-3
Blood	10
Ethylene Glycol	15
Motor Oil (SAE 10)	50
Corn Oil	65
Maple Syrup	150
Motor Oil (SAE 40)	250
Motor Oil (SAE 60)	1,000
Honey	2,000
Molasses	5,000
Chocolate Syrup	10,000
Ketchup	50,000
Peanut Butter	150,000
Lard	1,000,000

NOTES:  
<sup>1</sup> Viscosities shown are measured at room temperature (70°F) and are approximate. Values will increase at lower temperatures and decrease at warmer temperatures.

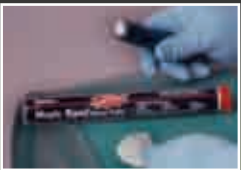
Bead Length<sup>2</sup> (inches)

Bead Diameter	50 ml	300 ml	380 ml	400 ml	1 lb	1 gal <sup>3</sup>
1/4"	124	740	945	992	1,073	9,450
3/8"	56	335	420	448	477	4,200
1/2"	30	180	230	240	265	2,360
5/8"	20	120	151	160	172	1,510

NOTES:  
<sup>2</sup> For methacrylates, epoxies, and silicones.  
<sup>3</sup> 1 gallon = 3,791.76 ml (128.1 oz.)

Shore Hardness

Sample Material	Shore Hardness	Scale
Bicycle Gel Seat	15-30	00
Chewing Gum	20	00
Rubber Band	20-25	A
Pencil Eraser	40	A
Door Seal	55	A
Car Tire Tread	60-70	A
Running Shoe Sole	70	A
Soft Skateboard Wheel	78	A
Leather Belt	80	A
Hydraulic O-Ring	70-90	A
Hard Skateboard Wheel	98	A
Shopping Cart Wheel	100	A
Ebonite Rubber	100	A
Solid Truck Tires	50	D
Hard Hat	75	D



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## MSDS / TDS

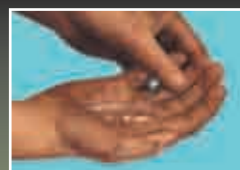
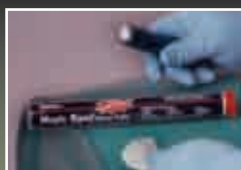
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## Warranty

Devcon will replace any material found to be defective. Because storage, handling and application of this material are beyond its control, Devcon accepts no liability for the results obtained.

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Technical Services:  
**1-800-933-8266**

Customer Services:  
**1-800-626-7226**

30 Endicott Street  
Danvers, MA 01923  
TEL: (978) 777-1100  
FAX: (978) 774-0516  
[www.devcon.com](http://www.devcon.com)

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