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**Edition 3** 



Repair Products and OEM Adhesives



A Brand of ITW Devcon



Trw Daycon.





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Devcon.

INTRODUCTION CONTENTS

#### The Bonding of Two Leading Brands

# Devcon. Permatex.

The uniting of the Devcon® and Permatex® brands under ITW Devcon yields one of the world's most comprehensive lines of OEM adhesives and products for plant maintenance/repair. In addition to making it easier for you to order both Devcon and Permatex products, the merger creates an expanded distributor network and a large, talented R&D team to develop new products for the future.



ZipGrip<sup>®</sup> Sticks. ZipGrip<sup>®</sup> Sticks. ZipGrip<sup>®</sup> Sticks.



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OEM ADHESIVES OEM ADHESIVES OEM ADHESIVES OEM ADHESIVES

# Total Adhesives Solutions Carefully Matched or Custom Formulated to Your Application

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, and the right
dispensing system. If desired, we will also supply
bonded samples and test results, as well
as training and support.

Place it whole or it

Place i

- ▼ 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

Brass		OEM Material	Instant Adhesives	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	Flex Welder™ Adhesives	Composite Welder™ FS	Metal Welder™ Adhesives	UV Adhesives
Cast Iron Copper Ferrite D D D D D D D D D D D D D D D D D D D		Aluminum 1	0			•					0	0	0	0		
Copper		Brass	•													
Ferrite		Cast Iron	•	•	•	•	•		•	•	0		•	0		•
Patriet metals  Sheet metal  Sheet metal  Caid rolled steel  Caid roll		Copper	•	•												
Paled metals		Ferrite	•	•	•		•	•	•				•			
Paled metals	META	Painted metals	•	•	•		•	•	•	•	•	•	•	•		
Stainless steel		Plated metals	•				•		•	•		•		•	•	
Cold rolled steel   Calvaraized   Calvarai		Sheet metal					•				•			•		
Galvanized		Stainless steel 1	•								0	0	0	0		
ABS		Cold rolled steel							•				•			
Acrylics (PMMA)		Galvanized							•	•			0	0		•
Fiberglass		ABS	•			•	•		•				•			
Gel coats		Acrylics (PMMA)				•	•			•			•			
Epoxy		Fiberglass	•		•	•	•	•	•							
Polyamides (Nylon) (6.6/6)   Deployesters (PET/PBA blends)   Deployers (PET/PBA blends)		Gel coats									•	•				
Polyseters (PET/PBA blends)   Polycarbonate		Ероху	•	•	•			•	•				•			
Polycarbonate		Polyamides (Nylon) (6,6/6)	•							•			•	0	0	
PPO and PPO blends		Polyesters (PET/PBA blends)							•	•						
Ninyls (PVC)		Polycarbonate	•						•	•			•			
SMCs   Styrene resins   Polyacrylate   Polyacrylate   Polyurea   Cellulosics (CAL, CAB, CAP)   Polysulfone   Phenolics   Daminates   Dam	ಲ	PPO and PPO blends	•													
SMCs   Styrene resins   Polyacrylate   Polyacrylate   Polyurea   Cellulosics (CAL, CAB, CAP)   Polysulfone   Phenolics   Daminates   Dam	LAST	Vinyls (PVC)		•	<b>O</b>		<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>			•			
Styrene resins	٩	RIM urethanes											•			
Polyacrylate		SMCs							•							
Polyurea		Styrene resins							•							
Cellulosics (CAL, CAB, CAP)		Polyacrylate							•	•						
Polysulfone		Polyurea	•										•	•	•	
Phenolics		Cellulosics (CAL, CAB, CAP)											•	•	•	
Laminates		Polysulfone	•									•				
Wood (hard and soft)		Phenolics											•			•
Plywood Particle board  Brick Concrete Rubber Honeycomb  Plywood  Particle board  Particle board  Possible Plywood Particle board  Possible Plywood Possible Pl		Laminates							•							
Particle board																
Particle board	W00	Plywood														
Concrete  Rubber  Honeycomb  O  O  O  O  O  O  O  O  O  O  O  O  O			•	_				•			0	•			•	
Rubber Honeycomb  D D D D D D D D D D D D D D D D D D		Brick														
Honeycomb D D D D D D		Concrete											•			
	至	Rubber														
Ceramics         Image: Ceramics of the control of the ceramics of the ceramic	10	Honeycomb														
		Ceramics	•	•	•		•	•					•	•	•	•
Glass		Glass														

Notes:  $^{1}$  Use of Metal Prep  $90^{\circ}$  primer/cleaner is recommended on these metals prior to bonding with Plastic Welder, Plastic Welder, Flastic Welder and Composite Welder FS.





















#### 2-Part Structural Epoxies

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 #	<b>Container Size</b>	Dispenser	Nozzle
14250	25 ml Dev-Tube™	_	_
14270	50 ml cartridge	14280 (manual) 14275 (pneumatic)	14285 14285
14210	2.5 ounces	_	_
DA051	400 ml cartridge	14410 (manual) 14400 (pneumatic)	14292 14292
14200	15 ounces	_	_
14630	9 pounds	_	_
DA032	10 gal kit	_	_
DA007	100 gal kit	_	_

#### **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) 14275 (pneumatic)	14285 14285
DA052	400 ml cartridge	14410 (manual) 14400 (pneumatic)	14292 14292
DA240	10 gal kit	_	_
DA296/29	7 100 gal kit	_	_

#### **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
	-	14275 (pneumatic)	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 14255	50 ml cartridge (clear) 50 ml cartridge (black)	14280 (manual) 14275 (pneumatic)	14285 14285
DA012	400 ml cartridge (black)	14410 (manual) 14400 (pneumatic)	14292 14292
DA112	10 gal kit (black)	_	_

#### **Devcon® 2 Ton® Clear Epoxy**

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

,	0.		
Item #	Container Size	Dispenser	Nozzle
14310	25 ml Dev-Tube™	_	_
14260	50 ml cartridge	14280 (manual) 14275 (pneumatic)	14285 14285
14355	400 ml cartridge	14410 (manual) 14400 (pneumatic)	14292 14292
14360	9 pounds	_	_
DA042	10 gal kit (clear)	_	_
DA039	10 gal kit (white)	_	_
DA041/047	100 gal kit (clear)	_	_
DA040	100 gal kit (white)	_	_
DA048	100 gal kit (black)	_	_

#### **Devcon® Epoxy Plus™ 25**

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

Item #	<b>Container Size</b>	Dispenser	Nozzle
14278	50 ml cartridge	14280 (manual) 14275 (pneumatic)	14285 14285
14350	400 ml cartridge	14410 (manual) 14400 (pneumatic)	14293 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**	14280 (manual) 14275 (pneumatic)	14285 14285
DA091	50 ml 2:1 plunger*	_	_
14415	400 ml cartridge	14410 (manual) 14400 (pneumatic)	14292 14292



Physical Properties	5 Minute® Epoxy	5 Minute® Epoxy Gel	One Minute™ Epoxy Gel	10 Minut	e™ <b>Epoxy</b>	2 Ton® Clear Epoxy	Epoxy Plus™25	HP 250
Color	Light Amber	Opaque	Amber	Black	Clear	Clear, White	Grey	Straw
Mix ratio (resin:hardener)	1:1	1:1	1:1	1:1	1:1	1:1	1:1	2:1
Mixed viscosity cps	10,000	Gel	70,000	90,000	80,000	8,000	70,000	105,000
Working time <sup>1</sup> minutes	3 ~ 6	4 ~ 7	45 sec	10	10	8 ~ 12	25	65
Fixture time <sup>2</sup> minutes	10 ~ 15	10 ~ 15	1	20	20	30 ~ 35	3.5 hours	5 hours
Functional cure hours	0.75 ~ 1	0.75 ~ 1	0.5 ~ 0.75	1.5	1.5	2	24	24
Adhesive tensile lap shear (ASTM D1002) psi	1900⁴	2500³	16004	2400³	2400³	2250³	2750³	3200³
Tensile elongation %	1	1	1	5	5	1	20	25
Peel strength pli	2 ~ 3	2 ~ 3	2 ~ 3	20 ~ 25	20 ~ 25	2 ~ 3	20 ~ 25	35 ~ 40
Impact resistance ft-lb/in <sup>2</sup>	5.5	6.5	4.5	10	10	6.5	10	12
Maximum service temperature Fary	-40 ~ 200	-40 ~ 200	-40 ~ 200	-67~200	-67~200	-40 ~ 200	-40 ~ 200	-67 ~ 250

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

2 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".

4 Bond line thickness of 0.005"

					Key: E	ccellent Very Good	O Fair O Poor
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	000	000	000	000	000	⊗ • •	• •
ALCOHOLS Glycol Isopropanol Methanol	000	000	0	<b>●</b> ⊗ ⊗	•	• 0 0	• • •
KETONES Acetone Methyl ethyl ketone	0 0	0	0	0	0	0 0	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0 0	0 0	0	0	0	0	•
HYDROCARBONS Gasoline (unleaded) Mineral spirits Motor oil	•	•	•	• •	•	•	•
CHLORINATED HYDROCARBONS Perchloroethylene	0	0	0	0	0	0	•
SALTS Sodium chloride Trisodium phosphate	0 0	0 0	0	0	0	0	<b>0</b>

Indicates that either the manual or pneumatic dispenser listed to the right may be used with that size cartridge.





















#### **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	14410 (manual)	14292
		14400 (pneumatic)	14292

#### Devcon® SC2002/SC2002NS

No-mix, single-component adhesive with an unlimited working time for potting/encapsulating and bonding metal, ceramics, glass, or concrete. Heat or induction cured. NS version is nonsagging.

Item #	<b>Container Size</b>
14700	20 oz Semkit (NS)
14701	20 oz Semkit

Physical Properties	Food Grade Pot & Seal	SC2002 / SC2002NS	Speaker Bonder™	5-Minute FR <sup>s</sup>	10-Minute FR
Color	White	Grey	Grey	Off-White	Off-White
Mix ratio (resin: hardener)	4:1	1 Part	1:1	1:1	1:1
Mixed viscosity cps	100,000	65,000	60,000	115,000	70,000
Working time <sup>1</sup> minutes	42	N/A	10	4 - 8	10
Fixture time <sup>2</sup> minutes	Heat Cure	Unlimited 2 @ 280°F	25	10 ~ 15	20 ~ 25
Functional cure hours	12 @ 75°F	.5 @ 212°F	24 @ 75°F	1	3
Adhesive tensile lap shear (ASTM D1002) $\rho si$	1980 (Heat Cure)	2200	2227	1365⁴	3140³
Tensile elongation %	1	1	1	1	5
Peel strength pli	2 ~ 3	3	2 ~ 3	2 ~ 3	17
Impact resistance ft-lb/in²	5.2	5.9	5.9	5.5	10
Maximum service temperature °F dry	-40 - 280	-60 - 300	-40 - 120	-40 - 200	-40 - 200

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

2 The time required for the adhesive to generate sufficient bond strength to allow parts to be handled without deformation of the bond line.
3 Per ASTM D1002 on grit-blasted steel, bond line thickness of 0.010".
4 Bond line thickness of 0.005." 5 Meets FAR 25.853/25.885 [vertical burn test] and UL94V-0.

		Key:	Excellent	Very Good	Fair Poor
CHEMICAL RESISTANCE					
ACIDS					
Acetic 10%	0	0	0	0	0
Hydrochloric 10% Sulfuric 10%	0	0	0	0	0 0
ALCOHOLS	U	O	O	O O	O O
Glycol				0	0
Isopropanol				0	0
Methanol	Õ	Ō	Ō	0	0
KETONES		_	_		
Acetone	0	0	0	0	0
Methyl ethyl ketone	0	0	0	0	0
ALKALIS		_	_		
Ammonium hydroxide 10%		0	0	0	0
Sodium hydroxide 10% HYDROCARBONS	•	•	•	0	0
Gasoline (unleaded)					0
Mineral spirits					
Motor oil				•	•
CHLORINATED HYDROCARBONS					
Perchloroethylene	0	0	0	0	0
SALTS					
Sodium chloride	•	•	•	0	•
Trisodium phosphate		•	•	0	•

#### Devcon® 5-Minute FR

Rapid setting epoxy paste for applications requiring a self-extinguishing structural adhesive.

Item #	Container Size	Dispenser	Nozzle
14271	50 ml cartridge	14280 (manual) 14275 (pneumatic)	14285 14285

#### Devcon® 10-Minute FR

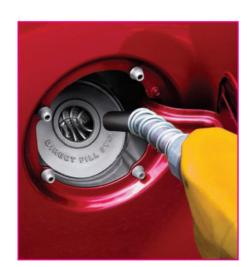
Flexible epoxy with good impact resistance, peel and lap shear for applications needing a self-extinguishing structural adhesive.

Item #	Container Size	Dispenser	Nozzle
14257	50 ml cartridge	14280 (manual) 14275 (pneumatic)	14285 14285

#### Devcon® Speaker Bonder™

Rubber toughened fast-curing structural adhesive with super impact, peel, and fatigue resistance. Ideal for speaker bonding.

Item #	Container Size	Dispenser	Nozzle
14702	50 ml cartridge	14280 (manual)	14285
		14275 (pneumatic)	14285



#### **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.

<b>Container Size</b>	Dispenser	Nozzle
50 ml cartridge	14280 (manual)	14285
	14275 (pneumatic)	14285
400 ml cartridge	14410 (manual)	14296
	14400 (pneumatic)	14296
	50 ml cartridge	50 ml cartridge   14280 (manual)   14275 (pneumatic)

#### **Devcon® Dev-Thane™ 2**

Faster-curing version of Dev-Thane  $^{\mathtt{m}}$  5 with a fixture time of 15 minutes.

Item #	<b>Container Size</b>	Dispenser	Nozzle
14501	50 ml cartridge	14280 (manual)	14285
		14275 (pneumatic)	14285
14502	400 ml cartridge	14410 (manual)	14296
		14400 (pneumatic)	14296

#### Devcon® Dev-Thane™ 1

Super fast-setting version of Dev-Thane™ 5, Dev-Thane™ 1 has a working time of only 30 seconds.

Item #	<b>Container Size</b>	Dispenser	Nozzle
14509	400 ml cartridge	14410 (manual) 14400 (pneumatic)	14296 14296

#### **Devcon® Rubber Adhesive**

Industrial-strength rubber adhesive for flexible, durable bonds to rubber, flexible plastics, metals, glass, and ceramics. Solvent-based, one-component contact adhesive that cures in 30 minutes and lasts for years. It has outstanding resistance to oils, acids, and alkalis. Flexible, waterproof, and UV-resistant. Excellent aging and weathering properties.

Item #	Container Size
14900	1 pt

Physical Properties	Dev-Thane™ 1	Dev-Thane™ 2	Dev-Thane™ 5
Color	Light Grey	Light Grey	Grey
Mix ratio (resin: hardener)	1:1	1:1	1:1
Mixed viscosity cps	45,000	42,000	20,000
Fixture time minutes	12	15	30
Working time minutes	0.5	2	5
Peel strength pli	65 ~ 75	60 ~ 75	60 ~ 75
Functional cure¹ hours @ 75° F	1.5	1.5	3
Tensile Elongation %	200	200	200
Cured hardness (ASTM D2240) Shore D	63	63	63
Adhesion Tensile Lap Shear (ASTM D1002) psi	1840	1890	1940

Notes: 1 Faster cure times can be achieved by heating.

	Key:	Excellent Very G	ood 🔘 Fair 🔘 Poor
CHEMICAL RESISTANCE			
ACIDS			
Acetic 10%	0	0	0
Hydrochloric 10%		•	•
Sulfuric 10%	•	•	•
ALCOHOLS			
Glycol	0	0	0
Isopropanol	0	0	•
Methanol	0	0	0
KETONES			
Acetone	0	0	0
Methyl ethyl ketone	0	0	0
ALKALIS			
Ammonium hydroxide 10%	•		0
Sodium hydroxide 10%	•	•	
HYDROCARBONS			
Gasoline (unleaded)	0	0	
Mineral spirits	•	•	•
Motor oil	•	•	•
CHLORINATED HYDROCARBONS			
Perchloroethylene	0	0	0
SALTS			
Sodium chloride	•	•	•
Trisodium phosphate	•	•	•

Indicates that either the manual or pneumatic dispenser listed to the right may be used with that size cartridge.









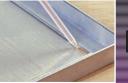












■ Excellent ■ Very Good ○ Fair ○ Poor

## 2-Part Structural Acrylics

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.

Item #	Container Size	Dispenser	Nozzl
14300	25 ml Dev-Tube <sup>™</sup> (straw)	_	_
14320	47 ml cartridge (straw)	14280 (manual)	14285
DA291	47 ml cartridge (white)	14275 (pneumatic)	14285
DA290	47 ml cartridge (black)		
14385	400 ml cartridge (straw)	14410 (manual)	14292
DA160	400 ml cartridge (white)	14400 (pneumatic)	14292
DA295	400 ml cartridge (black)		
14330	2 liter kit (straw)	_	_
DA033/034	10 gal kit (straw)	_	_
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
		14275 (pneumatic)	14285
DA170	400 ml cartridge (black)	14410 (manual)	14292
14390	400 ml cartridge (straw)	14400 (pneumatic)	14292
DA320	10 gal kit (straw)	_	_
DA305/307	100 gal kit (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.

Item #	Container Size	Dispenser	Nozzle
14165	490 ml cartridge (blue green)	14405 (manual)	15047
14166	490 ml cartridge (black)	Contact Devcon Te	ch Service
DA461/462	10 gal kit	_	_

#### **Devcon® Flex Welder™**

Fills gaps to 3/8" and provides exceptionally flexible bonds to plastics, composites, and metals in applications involving constant flexing, shock, or vibration.

Item #	Container Size	Dispenser	Nozzle
14345	47 ml cartridge	14280 (manual) 14275 (pneumatic)	14285 14285

#### **Devcon® Flex Welder™ FC**

Fast-curing version of Flex Welder, Flex Welder FC has a fixture time of 9 minutes and achieves functional cure in one hour.

Item #	Container Size	Dispenser	Nozzle
14324	400 ml cartridge (off-white)	14410 (manual)	14292
14325	400 ml cartridge (black)	14400 (pneumatic)	14292
DA312/313	100 gal kit (off-white)	_	_

#### **Devcon® Flex Bond™ Pipe Sealant**

A low-viscosity, high-strength methacrylate sealant / adhesive for joining and sealing PVC and plastic pipe.

Item #	Container Size	Dispenser	Nozzle
11400	4 oz 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.

Item #	Container Size	Dispenser	Nozzle
14366	35ml cartridge	14280 (manual) 14275 (pneumatic)	14285 14285
14367	380ml coax cartridge	14409 (manual) 14407 (pneumatic)	14293 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	380ml coax cartridge	14409 (manual) 14407 (pneumatic)	14293 14293

#### Devcon® Metal Prep 90™

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

Item #	Container Size	Dispenser	Nozzle
19650	1 pint	_	_



Physical Properties	Plastic V	Velder™	Plastic Welder™II	Composite Welder™ FS	Flex Welder™	Flex Welder™ FC	Flex Bond™ Pipe Sealant	Metal Welder™	Metal Welder™ II
Color	Straw, Black	White	Straw, Black, White	Blue Green, Black	Off-White	Off-White, Black	Purple	Grey / Beads	Grey / Beads
Mix ratio (resin: hardener)	1:1	1:1	1:1	10:1	1:1	1:1	N/A	10:1	10:1
Mixed viscosity cps	50,000 <sup>4</sup>	50,000 <sup>4</sup>	56,0004	120,000 <sup>4</sup>	52,000	52,000	1580	90,0004	90,0004
Working time <sup>1</sup> minutes	4 ~ 6	2~3	15 ~ 20	4 ~ 8	9 ~ 12	3~ 5	3 ~ 4	4 ~ 6	12 ~ 16
Fixture time <sup>2</sup> minutes	10 ~ 15	8~10	30 ~ 35	10 ~ 15	40 ~ 45	11 ~ 15	9 ~ 10	20 ~ 25	45 ~ 55
Functional cure hours	0.75 ~ 1	0.75 ~ 1	2 ~ 4	0.75 ~ 1	2 ~ 4	1	1	1 ~ 2	4
Adhesive tensile lap shear (ASTM D1002) psi	3500³	3500³	3000³	2250³	2563³	2554³	1482	2450	2020
Tensile elongation %	15 ~ 25	15 ~ 25	5 ~ 15	100 ~ 125	120	100	16	30 ~ 60	40 ~ 60
Peel strength pii	35 ~ 40	35 ~ 40	15 ~ 20	60 ~ 65	20 ~ 27	20 ~ 27	50	30 ~ 40	30 ~ 40
Impact resistance ft-lb/in <sup>2</sup>	22	22	17	22	20	19	N/A	>20	>20
Maximum service temperature F dry	-67 ~ 250	-67~250	-67 ~ 250	-40 ~ 250	-67 ~ 250	-40 ~ 250	200	-67 ~ 200	-67 ~ 200

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

ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	• •	<b>0 0 0</b>	<b>O O O</b>	000	000	O ••	<b>0 0 0</b>	<b>0 0 0</b>
ALCOHOLS Glycol Isopropanol Methanol	0	0	0	0	0	0	0	0
KETONES Acetone Methyl ethyl ketone	0	00	0	00	0	0	0	0
ALKALIS Ammonium hydroxide 10% Sodium hydroxide 10%	0	0	0	0	0	0	0	0
HYDROCARBONS Gasoline (unleaded) Mineral spirits Motor oil	•	•	•	0 0 0	0	<ul><li>∅</li><li>0</li><li><b>0</b></li></ul>	<ul><li>∅</li><li>0</li><li><b>0</b></li></ul>	<ul><li>∅</li><li>○</li><li>●</li></ul>
CHLORINATED HYDROCARBONS Perchloroethylene	0	0	0	0	0	0	0	0
SALTS Sodium chloride Trisodium phosphate	<b>O</b>	0	0	0	0	0	<b>O</b>	0

Indicates that either the manual or pneumatic dispenser listed to the right may be used with that size cartridge.





















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

From a world leader in cyanoacrylate (or super glue) technology, the comprehensive new line of Permatex® ZipGrip® Instant Adhesives is designed to handle the full range of OEM applications. Several versions are available for even the most specialized needs.

## Permatex® ZipGrip® General-Purpose Instant Adhesives

Permatex® ZipGrip® General Purpose Instant Adhesives are fast-curing cyanoacrylates in a range of viscosities for every application. Instant cure eliminates fixturing. Bonds metal, rubber, plastic, and all combinations. General-purpose or stay-in-place gels are ideal for vertical or inverted surfaces that fill a variety of gaps.

Item #	<b>Container Size</b>	P/N
70050	1 oz bottle	GPE 2
70061	1 lb bottle	GPE 2
70144	14 g bottle	GPE 3
70145	2 gm tube	GPE 3
70161	1 lb bottle	GPE 3
70213	1/3 oz bottle	GPE 15
70261	1 lb bottle	GPE 15
70350	1 oz bottle	GPE 30
70361	1 lb bottle	GPE 30
70450	1 oz bottle	GPE 100
70461	1 lb bottle	GPE 100
70550	1 oz bottle	GPE 125
70561	1 lb bottle	GPE 125
70650	1 oz bottle	GPE 180
70661	1 lb bottle	GPE 180
70750	1 oz bottle	GPE 1500
70761	1 lb bottle	GPE 1500
70940	20 gm tube	GPE Gel

# Permatex® ZipGrip® Toughened Instant Adhesives

Permatex® ZipGrip® Toughened Instant Adhesives are fast-curing cyanoacrylates in a range of viscosities for every application. Bonds metal, rubber, plastic, and all combinations. 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 #	<b>Container Size</b>	P/N
72050	1 oz bottle	TE 500
72061	1 lb bottle	TE 500
72150	1 oz bottle	TE 1000
72161	1 lb bottle	TE 1000
72250	1 oz bottle	TE 2400
72261	1 lb bottle	TE 2400
72350	1 oz bottle	TE 5000
72361	1 lb bottle	TE 5000
72940	20 gm tube	TE Gel

#### Permatex® ZipGrip® Low Odor Instant Adhesives

Permatex® ZipGrip® Low Odor Instant Adhesives are fast-curing cyanoacrylates in a range of viscosities for every application. Instant cure eliminates fixturing. Bonds metal, rubber, plastic, and all combinations. Low odor formulations virtually eliminate irritation to the eyes and nose!

Item #	Container Size	P/N
73050	1 oz bottle	L0 80
73061	1 lb bottle	L0 80

#### Permatex® ZipGrip® Instant Adhesive Accelerator

A clear/amber acetone based accelerator that provides excellent cleaning properties, and quickens the cure speed of all ZipGrip instant adhesives.

Item #	Container Size	P/N
44444	2 fl oz pump spray bottle	PR 100

## Permatex® ZipGrip® Surface-Insensitive Instant Adhesives

Permatex® ZipGrip® Surface-Insensitive Instant Adhesives are fast-curing cyanoacrylates in a range of viscosities for every application. Bonds metal, rubber, plastic, and all combinations. Surface Insensitive formulas overcome the slow fixturing or no-cure conditions that exist with acidic surfaces or very dry environments. These formulas bond to difficult-to-bond surfaces.

Item #	Container Size	P/N
71050	1 oz bottle	SIE 30
71061	1 lb bottle	SIE 30
71150	1 oz bottle	SIE 100
71161	1 lb bottle	SIE 100
71940	20 gm tube	SIE Gel



#### Permatex® ZipGrip® General Purpose Instant Adhesives

Product	Item Number	Container Size	Viscosity	Color	Туре	Gap Filling	Adhesive Tensile Shear	Service Temperature	Cure Speed Steel-Plastic-Rubber
GPE 2	70050 70061	1 oz bottle 1 lb bottle	2 cps	Clear	Ethyl	0.002"	3,200 psi	-65 to 200°F	n/a / 4 / <4 sec
GPE 3	70144 70145 70161	14 g bottle 2 gm tube 1 lb bottle	3 cps	Clear	Ethyl	0.003"	3,200 psi	-65 to 200°F	5-10 / 3-5 / <2 sec
GPE 15	70213 70261	1/3 oz bottle 1 lb bottle	15 cps	Clear	Ethyl	0.005"	3,200 psi	-65 to 200°F	5-10 / 4-10 / <3 sec
GPE 30	70350 70361	1 oz bottle 1 lb bottle	30 cps	Clear	Neomer Ethyl	0.004"	3,200 psi	-65 to 200°F	5-12 / 5-13 / <6 sec
GPE 100	70450 70461	1 oz bottle 1 lb bottle	100 cps	Clear	Ethyl	0.004"	3,200 psi	-65 to 200°F	10-20 / 10-20 / <5 sec
GPE 125	70550 70561	1 oz bottle 1 lb bottle	125 cps	Clear	Ethyl	0.004"	2,600 psi	-65 to 200°F	20-30 / 15-25 / <15 sec
GPE 180	70650 70661	1 oz bottle 1 lb bottle	180 cps	Clear	Ethyl	0.006"	3,000 psi	-65 to 200°F	10-25 / 10-20 / <4 sec
GPE 1500	70750 70761	1 oz bottle 1 lb bottle	1500 cps	Clear	Ethyl	0.008"	3,400 psi	-65 to 200°F	20-40 / 25-50 / <10 sec
GPE Gel	70940	20 gm tube	Gel	Clear	Ethyl	0.010"	3,500 psi	-65 to 200°F	50-70 / 25-65 / 20-30 sec

#### Permatex® ZipGrip® Toughened Instant Adhesives

Product	Item Number	Container Size	Viscosity	Color	Туре	Gap Filling	Adhesive Tensile Shear	Service Temperature	Cure Speed Steel-Plastic-Rubber
TE 500	72050 72061	1 oz bottle 1 lb bottle	500 cps	Black	Ethyl	0.006"	3,700 psi	-65 to 280°F	25-60 / 25-50 / 20-40 sec
TE 1000	72150 72161	1 oz bottle 1 lb bottle	1000 cps	Clear	Ethyl	0.008"	3,700 psi	-65 to 280°F	25-40 / 25-50 / 20-50 sec
TE 2400	72250 72261	1 oz bottle 1 lb bottle	2400 cps	Clear	Ethyl	0.009"	3,700 psi	-65 to 280°F	40-70 / 25-50 / 25-50 sec
TE 5000	72350 72361	1 oz bottle 1 lb bottle	5000 cps	Black	Ethyl	0.009"	3,700 psi	-65 to 280°F	25-60 / 25-50 / 20-40 sec
TE Gel	72940	20 gm tube	Gel	Clear	Ethyl	0.010"	3,700 psi	-65 to 280°F	45-70 / 45-60 / 30-60 sec

#### Permatex® ZipGrip® Low Odor Instant Adhesives

LO 80	73050 73061	1 oz bottle 1 lb bottle	80 cps	Clear	Ethoxyenthyl	0.005"	2,600 psi	-65 to 200°F	25-40 / 20-25 / <15 sec

#### **Permatex® ZipGrip® Surface Insensitive Instant Adhesives**

SIE 30	71050 71061	1 oz bottle 1 lb bottle	30 cps	Clear	Neomer Ethyl	0.004"	3,200 psi	-60 to 200°F	5-12/3-7/<6 sec
SIE 100	71150 71161	1 oz bottle 1 lb bottle	100 cps	Clear	Neomer Ethyl	0.005"	3,200 psi	-60 to 200°F	8-12 / 3-7 / <6 sec
SIE Gel	71940	20 gm tube	Gel	Clear	Ethyl	0.010"	3,500 psi	-60 to 200°F	50-70 / 25-65 / 20-30 sec

\* Grit blasted steel \*\*Commercial Item Standard A-A-3097 Type II Class 1 \*\*\*Commercial Item Standard A-A-3097 Type I Class 2



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Tru Bond™ 18400 Series (UV PSA)

Tru Bond™ 18400 Series are UV curable pressure

sensitive adhesives (PSAs). Solvent-free liquids,

they can be applied directly to parts or as films

and then UV cured to create PSAs. These adhesives

can be applied in a wide range of film or bead

thicknesses and will cure within a broad range of

#### **UV Light-Cured Adhesives**

Devcon Tru Bond™ light-cured adhesives offer the flexibility of unlimited open time plus the productivity of instant cure when exposed to UV light.

#### Tru Bond™ 18100 Series

Designed for bonding glass to glass and dissimilar substrates such as steel and aluminum, Tru  $\mathsf{Bond}^{\scriptscriptstyle\mathsf{TM}}$ 18100 Series adhesives cure to a hard, rigid polymer when exposed to light.

Item #	Container Size
18100	25 ml syringe
18101	1 liter
18105	25 ml syringe
18106	1 liter
18110	25 ml syringe

#### Tru Bond™ 18200 Series

Designed for bonding plastics including ABS, polycarbonate, and acrylic, Tru Bond™ 18200 Series adhesives form flexible bonds with superior resilience and impact resistance. These adhesives cure in seconds when exposed to light—even through translucent substrates.

Item #	Container Size
18200	25 ml syringe
18201	1 liter
18205	25 ml syringe
18206	1 liter
18210	25 ml syringe

#### Tru Bond™ 18300 Series

Container Size

Thick version (#18300) forms hard, mar resistant domes on decals, jewelry, tags and emblems and can be dyed or pigmented. This thin version (#18305) flows and self-levels onto capacitors or resistors and forms a very thin film to protect flexible substrates.

18300 18301	25 ml syringe 1 liter		ges. Once cured, they provide an excellent of peel strength and creep resistance.	
18305	25 ml syringe	Item #	Container Size	
18306	1 liter	18401	25 ml syringe	
	The Report SECTION AND SECTION OF	18402	1 liter	

Product	Color	Viscosity cps	Specific Gravity g/ml	Tensile Strength <sub>psi</sub>	Elongation (ASTM D882) %	% Volume Shrinkage	Water Absorption (ASTM D570) 24 hours	Shore Hardness	Temperature Range 'F
18100	Amber	205	1.05	3,197	70	8.48	7.29	88D	-65 ~ 225
18101	Amber	205	1.05	3,197	70	8.48	7.29	88D	-65 ~ 225
18105	Amber	2,600	1.05	3,197	70	8.48	7.29	88D	-65 ~ 225
18106	Amber	2,600	1.05	3,197	70	8.48	7.29	88D	-65 ~ 225
18110	Amber	Gel	1.05	3,197	70	8.48	7.29	88D	-65 ~ 225
18200	Clear	810	1.05	1,396	450	4.77	2.36	61D	-65 ~ 225
18201	Clear	810	1.05	1,396	450	4.77	2.36	61D	-65 ~ 225
18205	Clear	1,700	1.05	1,396	450	4.77	2.36	61D	-65 ~ 225
18206	Clear	1,700	1.05	1,396	450	4.77	2.36	61D	-65 ~ 225
18210	Clear	gel	1.05	1,396	450	4.77	2.36	61D	-65 ~ 225
18300	Water Clear	2,240	1.96	6,000	4	5.86	0.20	91D	-65 ~ 225
18301	Water Clear	2,240	1.96	6,000	4	5.86	0.20	91D	-65 ~ 225
18305	Water Clear	750	1.99	3,658	37	2.53	0.24	95D	-65 ~ 225
18306	Water Clear	750	1.99	3,658	37	2.53	0.24	95D	-65 ~ 225
18401	Clear to Straw	2,500	1.15	_	_	4.77	_	10A	-10 ~ 125
18402	Clear to Straw	2,500	1.14	_	_	4.77	_	10D	-10 ~ 125

#### Manual and Pneumatic Systems

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

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

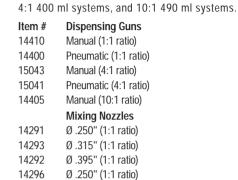
Manual and pneumatic dispensing guns and custom designed static mixing nozzles for 1:1 and 10:1 50 ml systems.

Item #	Dispensing Guns	
14280	Manual (1:1 and 10:1 ratio)	
14275	Pneumatic (1:1 ratio)	
	Mixing Nozzles	
14285	Ø .25" (1:1 and 10:1 ratio)	

#### Devcon® 380 ml Coaxial **Dispensing System**

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

Item #	Dispensing Guns
14409	Manual (10:1 ratio)
14407	Pneumatic (10:1 ratio)
	Mixing Nozzles
14293	Ø .315" (10:1 ratio)



15047

**Devcon® 400 ml Dispensing System** 

Manual and pneumatic dispensing guns and custom

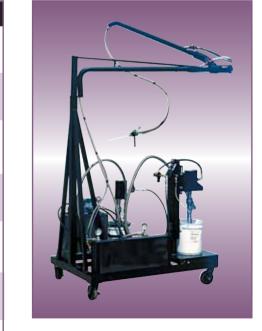
designed static mixing nozzles for 1:1 400 ml systems,

Ø .394" (10:1 or 4:1 ratio)



#### Mix Nozzle Selector Guide

Product	Element	Product Compatibility
<b>14285</b> (for Mark V 1:1 50 ml gun)	20 element 6.35 mm or Ø.250"	1-Minute, 5-Minute, 2-Ton, Epoxy Plus 25, HP 250, Clear Coat, 5-Minute Gel, Plastic Welder, Plastic Welder II, Flex Welder, Plastic Welder SD, Metal Welder
<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, Flex Welder, Flex Welder FC
<b>14292</b> (for 400 ml 1:1 manual or pneumatic gun)	18 element 10 mm or Ø .395"	1-Minute, 5-Minute, 2-Ton, Epoxy Plus 25, HP 250, Clear Coat, 5-Minute Gel, Plastic Welder, Plastic Welder II, Flex Welder, Flex Welder FC, Plastic Welder SD, Food Grade Pot & Seal
14293 (for 400 ml 1:1 manual or pneumatic gun) (for 380 ml 10:1 Co-axial manual or pneumatic gun)	32 element 8 mm or Ø .315"	Epoxy Plus 25, Cable Cast, Metal Welder, Metal Welder II
<b>14294</b> (for Mark V 1:1 50 ml gun)	17 element 4 mm or Ø .158"	1-Minute, 5-Minute Gel, Plastic Welder, Plastic Welder II, Flex Welder
<b>14296</b> (for Dev-Thane * 5 1:1)	32 element 6 mm or Ø .250"	Dev-Thane <sup>™</sup> 5
<b>15047</b> (for 400 ml 4:1 or 490 ml 10:1 manual or pneumatic gun)	24 element 10 mm or Ø .394"	Flexane FC Rubber Repair Liquid, Flexane FC Rubber Repair, Composite Welder FS, Edge & Seal (T-35), High Temp Edge & Seal (T-36)























#### Products for Both Maintenance/Repair and **OEM** Assembly



**ASSEMBLY & REPAIR** 

#### Permatex<sup>®</sup> 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.



## PERMATEX® THREADLOCKER

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



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



#### **Permatex® Liquid Threadlockers**

Product	ltem Numbers	Container Size	Typical Use	Color	Viscosity cP	Torque in. lbs.* Break/Prevail	Temperature Range	Cure Fixture** (Full)	Fixture/ with Primer	Specific Gravity
Permatex® Low Strength Threadlocker PURPLE	22210 22250 22225	10 ml bottle 50 ml bottle 250 ml bottle	Up to 1/4" (6mm)	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	09178 24210 24250 24225 24201	1 ml pouch 10 ml bottle 50 ml bottle 250 ml bottle 1 L bottle	1/4" to 3/4" (6-20mm)	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	24310 24350 24325 24301	10 ml bottle 50 ml bottle 250 ml bottle 1 L bottle	1/4" to 3/4" (6-20mm)	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" (10-25mm)	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	09179 27110 27150 27125 27101	1 ml pouch 10 ml bottle 50 ml bottle 250 ml bottle 1 L bottle	3/8" to 1" (10-25mm)	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	27210 27250 27225 27201	10 ml bottle 50 ml bottle 250 ml bottle 1 L bottle	3/8" to 11/2" (10-38mm)	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	27710 27750 27725 27701	10 ml bottle 50 ml bottle 250 ml bottle 1 L bottle	1" and over (25mm+)	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	29010 29050 29025 29001	10 ml bottle 50 ml bottle 250 ml bottle 1 L bottle	#2 to 1/2" (2.2-12mm)	Green	12	90/310	-65° to 300°F (-54° to 149°C)	20 min (24 hrs)	3 min	1.08

\* .375"-phosphate steel

\*\*Fixture strength is equivalent to 20% of full cure strength



high-pressure and low-pressure systems

general-purpose sealants



▼ Permatex® anaerobic and RTV silicone form-in-place gasket makers, dressings, and

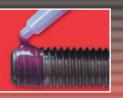


















#### **Permatex® Medium Strength Threadlocker BLUE**

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

Item #	Container Size	P/N
09178	1 ml pouch, display box	09178
24210	10 ml bottle, carded	24210
24250	50 ml bottle	24250
24225	250 ml bottle	24225
24201	1 L bottle	24201

disassembly. Mil-Spec (S-46163A) Type II, Grade N.

#### Permatex® High Strength Threadlocker RED

High strength threadlocker for heavy-duty applications 3/8" to 1" (10mm to 25mm). 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 # 09179	Container Size 1 ml pouch, display box	<b>P/N</b> 09179
27110	10 ml bottle, carded	27110
27150	50 ml bottle	27150
27125	250 ml bottle	27125
27101	1 L bottle	27101

**Permatex® Low Strength Threadlocker PURPLE** Low strength threadlocker designed for fasteners under 1/4" (6mm) that require occasional adjustment. Removable with hand tools for easy disassembly.

Item #	<b>Container Size</b>	P/N
22210	10 ml bottle, carded	22210
22250	50 ml bottle	22250
22225	250 ml bottle	22225

Mil-Spec (S-46163A) Type II, Grade M.

#### Permatex® Permanent Strength Threadlocker GREEN Threadlocker RED

A permanent, high strength threadlocker that is applied to fasteners 3/8" to 1" (10mm to 25mm) 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	P/N
26210	10 ml bottle, carded	26210
26250	50 ml bottle	26250
26225	250 ml bottle	26225
26201	1 L bottle	26201

# Permatex® Penetrating Grade

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 12mm) in size. Localized heating and hand tools are needed for disassembly. Mil-Spec (S-46163A) Type III, Grade R.

Item #	Container Size	P/N
29010	10 ml bottle, carded	29010
29050	50 ml bottle	29050
29025	250 ml bottle	29025
29001	1 L bottle	29001

#### **Permatex® Surface Insensitive Permatex® Large Diameter Threadlocker BLUE Threadlocker RED**

Medium/High strength threadlocker for general-purpose A high strength adhesive for locking and sealing large applications. Especially well-suited for 1/4" to 3/4" bolts and studs 1" (25mm+) or larger in diameter. Heat (6mm to 20mm) fasteners that have a slight oil film. may be required to weaken bond before parts can be disassembled. Mil-Spec (S-46163A) Type I, Grade L.

Item #	Container Size	P/N
27710	10 ml bottle, carded	27710
27750	50 ml bottle	27750
27725	250 ml bottle	27725
27701	1 L bottle	27701

#### **Permatex® High Temperature Threadlocker RED**

Hi-temp/hi-strength threadlocker for heavy-duty applications. Prevents bolts 3/8" to 11/2" (10mm to 38mm) 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	P/N
27210	10 ml bottle, carded	27210
27250	50 ml bottle	27250
27225	250 ml bottle	27225
27201	1 L bottle	27201

Permatex® GEL TWIST... and GEL SQUEEZE... 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™ and GEL SQUEEZE™ 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" (6mm to 25mm). Locks and seals while preventing parts from loosening due to vibration. Protects threads from corrosion. Removable with hand tools for easy disassembly.

Item #	<b>Container Size</b>	P/N	÷
24005	5 g GEL SQUEEZE™ applicator, carded	24005	
24010	10 g GEL TWIST™ applicator, carded	24010	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" (10mm to 25mm) 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 #	<b>Container Size</b>	P/N	
27005	5 g GEL SQUEEZE™ applicator, carded	27005	
27010	10 g GEL TWIST™ applicator, carded	27010	27115



#### **Permatex® GEL TWIST™ and GEL SQUEEZE™ Threadlockers**

Product	Item Numbers	Container Size	Typical Use	Color	Viscosity cP	Torque in. lbs.* Break/Prevail	Temperature Range	Cure Fixture** (Full)	Fixture/ with Primer	Specific Gravity
Permatex® Medium Streng Threadlocker BL Gel		5 g GEL SQUEEZE™ Applicator 10 g GEL TWIST™ Applicator	1/4" to 1" (6-25mm)	Blue	75,000/ 900,000 Thixotropic	115/53	-65° to 300°F (-54° to 149°C)	15 min (24 hrs)	n/a	1.15
Permatex® High Strength Threadlocker R Gel		5 g GEL SQUEEZE <sub>TM</sub> Applicator 10 g GEL TWIST <sub>TM</sub> Applicator	3/8" to 1" (10-25mm) and greater	Red	75,000/ 900,000 Thixotropic	175/230	-65° to 300°F (-54° to 149°C)	15 min (24 hrs)	n/a	1.13

Ordering number in Canada



Prevents vibration loosening.

Item # 24310

24350

24325

24301

**Container Size** 

50 ml bottle

1 L bottle

250 ml bottle

10 ml bottle, carded



P/N

24350

24325

24201

24310 24300





















CAUTION: MAY CAUSE ALLERGE SAT BLACTION, EYE AND SKIN IRREMAN

PRECAUCIONES: PLEDE CALLA



#### Permatex® Retaining Compounds

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	P/N
60910	10 ml bottle, carded	60910
60950	50 ml bottle	60950
60925	250 ml bottle	60925
60901	1 L bottle	60901

#### **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	P/N
64050	50 ml bottle	64050

#### 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	P/N
68050	50 ml bottle	68050
68025	250 ml bottle	68025
68001	1 L bottle	68001

#### **Permatex® Maximum Temperature Bearing Mount**

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

Item #	Container Size	P/N
62050	50 ml bottle	62050
62025	250 ml bottle	62025
62001	1 L bottle	62001

## Permatex® Retaining Compounds

Product	Item Numbers	Container Size	Color	Max Gap Fill (Diametral)	Viscosity cP	Shear Strength	Temperature Range	Cure - Steel Fixture/Full	Specific Gravity
Permatex® Bearing Mount For Close Fits	60910 60950 60925 60901	10 ml bottle 50 ml bottle 250 ml bottle 1 L bottle	Green	.005″	125	3,000 PSI	-65° to 300°F (-54° to 149°C)	10 min/ 24 hrs	1.10
Permatex® Maximum Temperature Bearing Mount	62050 62025 62001	50 ml bottle 250 ml bottle 1 L bottle	Green	.015″	8,500	3,800 PSI	-65° to 450°F (-54° to 232°C)	1 hr/ 24 hrs	1.16
Permatex® High Temperature Sleeve Retainer	64050 64001	50 ml bottle 1 L bottle	Green	.007″	600	3,000 PSI	-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 PSI	-65° to 300°F (-54° to 149°C)	10 min/ 1-2 hrs	1.13
Permatex® Bearing Mount For Relaxed Fits	68050 68025 68001	50 ml bottle 250 ml bottle 1 L bottle	Green	.015″	1,250	3,500 PSI	-65° to 300°F (-54° to 149°C)	10 min/ 24 hrs	1.10

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 0.50mm.

tem #	Container Size	P/N
6050	50 ml tube, carded	66050



#### 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 on-line 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

Item #	Container Size	P/N	4
56521	50 ml tube, carded	56521	19545
56525	250 ml tube	56525	
56501	1 L bottle	56501	

#### **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 wear 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).

ltem #	Container Size	P/N	•	
59235	50 ml tube, carded	59235	17358	
59225	250 ml tube	59225		
59201	1 L bottle	59201		



Ordering number in Canada



#### Permatex® Thread Sealants

Product	Item Numbers	Container Size	Color	Viscosity cP	Seal to Operating Pressure	Temperature Range	Specific Gravity
Permatex® Pneumatic/Hydraulic Sealant	54550	50 ml bottle	Purple	14,000	4 hrs	-65° to 300°F (-54° to 149°C)	1.02
Permatex® High Performance Thread Sealant	56521 56525 56501	50 ml tube 250 ml tube 1 L bottle	White	300,000	4 hrs	-65° to 300°F (-54° to 149°C)	1.10
Permatex® High Temperature Thread Sealant	59235 59225 59201	50 ml tube 250 ml tube 1 L bottle	White	350,000	4 hrs	-65° to 400°F (-54° to 204°C)	1.21
Permatex® Maximum Temperature Thread Sealant	56750 56725 56701	50 ml tube 250 ml tube 1 L bottle	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® Pipe Joint Compound	80045	16 oz bottle	Black	40,000	Instant/ Non-Curing	-65° to 400°F (-54° to 204°C)	1.28





















#### **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	P/N
56750	50 ml tube, carded	56750
56725	250 ml tube	56725
56701	1 L bottle	56701

#### 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	4
80632	4 oz can	14H	80510
80633	16 oz can	14D	

#### Soft Set Thread Sealant 61 White with PTFE

NSF-61 certified for use with potable water piping systems. Flexible, white, non-hardening, non-separating paste with PTFE. Lubricates and seals all threaded connections. Withstands up to 3.000 PSI on gases from -50°F to 400°F: 10.000 PSI on liquids from -50°F to 500°F. Use on PVC, CPVC, ABS, polyethylene, polypropylene, iron, steel, copper, or brass threads.

THREAD SEALANTS & ACTIVATORS

Item #	Container Size	P/N
61608	8 oz brush-top	61608
61616	16 oz brush-top	61616

#### Soft Set Thread Sealant 61 Blue

NSF-61 certified for use with potable water piping systems. Contains no PTFE. Lubricates and seals all threaded connections. Withstands up to 3,000 PSI on gases from -50°F to 400°F; 10,000 PSI on liquids from -50°F to 500°F. Use on PVC, CPVC, ABS, polyethylene, polypropylene, iron, steel, copper, or brass threads.

Item #	Container Size	P/N
61708	8 oz brush-top	61708
61716	16 oz brush-top	61716

#### 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	P/N
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.

ltem #	Container Size	P/N	•
80045	16 oz bottle	51D	80528



#### **Activators**

#### Permatex<sup>®</sup> Surface Prep<sup>™</sup> **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 cleaning and preparing parts and surfaces. ▲ NFPA Fire Code 30B: Level 1

Item #	Container Size	P/N
24163	6 oz aerosol can, 4.5 oz net wt	24163
19266	1 gallon	19266

Ordering number in Canada

22

#### Permatex® Activator T

A solvent-based activator that can be used to speed the cure of Permatex anaerobic products. Recommended for applications with inert surfaces or passive metals and with large bond gaps. Use activator when temperatures are below room temperature (especially when cure conditions are below 59° F (15°C).

Item #	Container Size	P/N
19267	1.75 oz pump spray bottle	19267
19268	1 gallon	19268





## **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. Non-paintable. Mil-A-46106B Type I

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Item #	Container Size	P/N	*
80050	3 oz tube, carded	66BR	80533
81913	7.25 oz Automatic Tube®	81913	
85913	7.25 oz PowerBead™can	85913	
80855	11 oz cartridge	66C	80834
59591	4.5 gallon pail	59591	

NSF.) (ANSI)

#### 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. Non-paintable. Mil-A-46106B Type I

Item #	Container Size	P/N	*
81158	3 oz tube, carded	16BR	81237
81173	11 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	P/N	
21425	4 g mixer cups	21425	21431

#### Permatex® Black **Super Weatherstrip Adhesive**

A professional, black weatherstrip adhesive that blends with black weather stripping for less clean-up. Withstands temperature extremes. Resistant to gasoline, kerosene, antifreeze and most solvents. Permanently bonds all weather stripping. A superior adhesive for bonding a variety of common materials.

Item #	Container Size	P/N
81850	5 fl oz tube, boxed	82

#### **Permatex® Super Weatherstrip Adhesive**

A professional, high strength weatherstrip adhesive ideal for bonding a variety of common materials. Permanently bonds weatherstrip and a variety of neoprene and other materials. Withstands temperature extremes. Waterproof. Resists gasoline, antifreeze, kerosene, and most solvents.

Item #	Container Size	P/N	*
81731	5 fl oz tube, boxed	80	17361

#### Permatex® All Purpose Spray Adhesive

Dries clear with superior bonding strength. For permanent or repositionable applications. Unique formula resists water and humidity. Applications include porous and nonporous materials. ▲ NFPA Fire Code 30B: Level 3

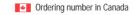
Item #	Container Size	P/N
82019	16 oz aerosol can, 10.5 oz net wt	118DA

#### **Devcon® Duco® Cement**

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

Item #	Container Si
6245	1 fl oz





















Super Weatherstrip







GASKETING GASKET MAKERS GASKET MAKERS GASKETING



#### **Permatex® Gasket Makers**

Product	Item Numbers	Color	Gap Fill	Typical Use	Temperature Range	Flange Type	Cure Type	Specific Gravity
Permatex® the Right Stuff® Gasket Maker	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
Permatex® Ultra Black® Maximum Oil Resistance Gasket Maker	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
Permatex® Ultra Copper® Maximum Temperature RTV Silicone Gasket Maker	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
Permatex® Ultra Blue® RTV Silicone Gasket Maker	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
Permatex® Ultra Grey® Gasket Maker	82194 85084 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
Permatex® Sensor-Safe Blue RTV Silicone Gasket Maker (6BR)	80022, 81860, 85860, 80628	Blue	0.25"	General-purpose sealing	-65° to 400°F (-54° to 204°C), 500°F (260°C) intermittent	Rigid or Flexible	Silicone (Acetoxy)	1.30
Permatex® High-Temp Red RTV Silicone Gasket (26BR)	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 (Acetoxy)	1.05
Permatex® Sensor-Safe High-Temp RTV Silicone Gasket (27BR)	81422 81686	Orange	0.25"	Oxygen sensor-safe, high temperature	-65° to 600°F (-54° to 316°C), 650°F (343°C) intermittent	Rigid or Flexible	Silicone (Acetoxy)	1.05
Permatex® Anaerobic Flange Sealant	51531 51580	Dark Purple	0.010" (0.050" primed)	For flexible applications	-65° to 300°F (-54° to 149°C)	Rigid	Anaerobic	1.10
Permatex® Anaerobic Gasket Maker	51817 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
Permatex® High Temperature Anaerobic Flange Sealant	51031	Red	0.010" (0.020" primed)	High temperature applications, excellent solvent resistance	-65° to 400°F (-54° to 204°C)	Rigid	Anaerobic	1.08





#### **Application Instructions**

- 1. Clean and dry parts.
- 2. Apply a continuous bead of the Right Stuff® to one surface, surrounding all bolt holes.
- 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.



















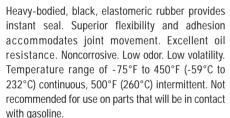




# **Ultra Series**



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



Item #	Container Size	P/N	4
25224	7 oz Automatic Tube®	25224	
85224	7.5 oz PowerBead™can	85224	26015
29208	5 oz cartridge	29208	
33694	10.1 fl oz cartridge	33694	
29247	short caulking gun	29247	



#### 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 500°F (-54°C to 260°C) intermittent. Resists common fluids and excessive vibration.

Item #	Container Size	P/N	*	
82180	3.35 oz tube, carded	82180	59803	
82080	8.75 oz Automatic Tube®	82080		
85080	9.5 oz PowerBead™can	85080		
24105	13 oz cartridge	24105	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 500°F (-54°C to 260°C) intermittent. Resists common fluids and excessive vibration.

Item #	Container Size	P/N	*
82194	3.5 oz tube, carded	82194	18572
85084	9.5 oz PowerBead™can	85084	
82195	13 oz cartridge	82195	

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

Premium silicone that can withstand operating environments to 700°F (371°C) intermittent. Fills gaps to 0.25" when fully cured. Superior adhesion. Three times more oil resistant than conventional silicones; eight times more flexible than cut gaskets.

Item #	Container Size	P/N	4
81878	3 oz tube, carded	101BR	17914
82751	300 ml cartridge	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 500°F (-54°C to 260°C) intermittent. Resists common fluids and excessive vibration.

Item #	Container Size	P/N	*
81724	3.35 oz tube, carded	77BR	81805
85519	9.5 oz PowerBead™can	85519	
81725	13 oz cartridge	77C	17359
58791	4.5 gallon pail	58791	

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

The original Permatex blue makes reliable "formedin-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 500°F (-54°C to 260°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	
85860	7.25 oz PowerBead™can	85860	
80628	11 oz cartridge	6C	80580

#### Permatex® High-Temp Red (NSF.) **RTV Silicone Gasket**



Formulated for high-temp applications. Sensor-safe, 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 650°F (-54°C to 343°C) intermittent. Fills gaps to 0.25" when fully cured. MIL-A-46106 B

	•		
Item #	Container Size	P/N	4
81160	3 oz tube, carded	26BR	81311
81915	7.25 oz Automatic Tube®	81915	
85915	7.25 oz PowerBead™can	85915	
81409	11 oz cartridge	26C	81312
59691	5 gallon pail	59691	



#### 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	P/N	*
51817	6 ml tube, carded	51817	19549
51813	50 ml tube, carded	51813	19550
51845	300 ml cartridge	51845	

#### Permatex® High Temperature **Anaerobic Flange Sealant**

A high temperature sealant specially engineered for making or dressing gaskets in rigid assemblies. Able to withstand temperatures to 400°F (204°C), fills gaps up to 0.020" (primed) and permits clamping loads to be maintained for strong, leakproof assemblies.

Item #	Container Size	P/N
51031	50 ml tube	51031

#### **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	P/N	
51531	50 ml tube	51531	17369
51580	300 ml cartridge	51580	



Ordering number in Canada























## **Urethane Casting Compounds**

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

#### Devcon® Flexane® 80 Liquid

Medium-viscosity (10,000 cps) 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 (6000 cps) 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) 15041 (pneumatic)	15047 15047

#### **Devcon® High Temp Edge & Seal (T-36)**

Abrasion-resistant urethane coating for dryer fabric and felt belting in the papermaking industry. Excellent flexibility and temperature resistance.

tem#	Container Size	Dispenser	Nozzie
DF045	400 ml cartridge	15043 (manual) 15041 (pneumatic)	15047 15047

## Devcon® Flex-Add™

URETHANE CASTING COMPOUNDS

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



Physical Properties	Flexane® 80 Liquid	Flexane® 94 Liquid	Edge & Seal (F.35)	High Temp Edge & Seal (1-36)
Color	Black	Black	Black	Amber
Mix ratio by weight (resin: hardener)	77:23	69:31	80:20	80:20
Mixed viscosity cps	10,000	6000	5000	12,000
Pot life minutes @ 75 F	30	10	3	3
Specific volume inches³/pound	26.5	26.5	26.5	25.0
Coverage per pound inches 2 @ 1/4" thickness	106	106	106	100
Functional cure hours	16	16	1.5	1.0
Demolding time hours	10	5	N/A	N/A
Cured hardness (ASTM D2240) Share A	87	97	94	94
Cured shrinkage (ASTM D2566) inch/inch	0.0018	0.0014	0.0014	0.0014
Tensile strength (ASTM D412) psi	2100	2800	3300	3300
Tear resistance (ASTM D624) pli	350	415	430	515
Abrasion resistance (weight loss*)	285	330	250	88
Maximum elongation (ASTM D412) %	650	500	450	350
Dielectric strength (ASTM D149) volts/mil	350	350	350	350
Maximum continuous service temperature 'F wet	120	120	120	250
Maximum continuous service temperature F dy	180	180	180	350

Notes: 4 Taber H-18 wheel (mg/1000 revolutions @1000 gram load)

			Key: Excellent	♥ Very Good
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% Sulfuric 50% Phosphoric 10%		© • • • •	0 0 0 0	0 0 0 •
ALCOHOLS Methanol Isopropanol	0	0 0	0 0	0 0
KETONES Acetone Methyl ethyl ketone	0	0 0	0 0	<b>0</b>
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0	0	<b>O</b>	0
HYDROCARBONS Gasoline (unleaded) Mineral spirits	0 0	<b>⊗</b> ⊗	0 0	0 0
SALTS Sodium chloride Trisodium phosphate Aluminum sulfate 10% Sodium carbonate 10%	0 0 0	0 0 0	0 0 0	0 0 0

























#### **Urethane Repair Compounds**

Flexible urethane compounds for repairing worn or damaged belting or 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, and expansion/contraction.

Item #	Container Siz
15820	1 lb
15050	4 lh

#### **Devcon® Flexane® High Performance Putty**

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

Item #	<b>Container Size</b>
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) 15041 (pneumatic)	15047 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) 15041 (pneumatic)	15047 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 #	<b>Container Size</b>	Dispenser	Nozzle	
15051	400 ml cartridge		14292	
		14400 (pneumatic)	14292	
15000	Jacket Repair Kit	_	_	
DA070	75 gal Kit	_	_	

#### **Devcon® Flexane® Primers**

Required for maximum adhesion of Flexane® products.

FL-10 Primer for all metals

(greater than 80 psi)

FL-20 Primer for rubber, wood, fiberglass, and concrete FL-40 Primer for rubber. Ensures ultimate peel strength

Item #	Primer	Container Siz
15980	FL-10	4 oz
15985	FL-20	4 oz
1500/	EI 40	1.07



Indicates that either the manual or pneumatic dispenser listed to the right may be used with that size cartridge.

Physical Properties	Flexane® 80 Putty	Flexane® High Performance Putty	Flexane® Fast Cure	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 (resin: hardener)	72:28	94:6	80:20	80:20	80:20	63:37	72:28
Mixed viscosity cps	Putty	Putty	Putty	5800	40,000	10,000	Putty
Pot life minutes @ 75 F	20	10	8	8	45	10	25
Specific volume inches*/pound	23.5	23.5	23.5	26.5	26.0	22.6	23.5
Coverage per pound inches *@ 1/4" thickness	94	94	94	106	104	90	94
Functional cure hours	12	16	3	2	24	2	12
Demolding time hours	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cured hardness (ASTM D2240) Share A	87	78	88	94	86	83	87
Cured shrinkage (ASTM D2566) inch/inch	0.0014	0.125	0.0014	0.0018	0.235	0.0014	0.0014
Tensile strength (ASTM D412) psi	1700	4500	2400	3300	3500	2600	1700
Tear resistance (ASTM D624) pli	300	400	275	430	400	325	280
Abrasion resistance (weight loss 4)	280	140	220	330	90	NA	300
Maximum elongation (ASTM D412) %	300	600	500	450	600	800	300
Dielectric strength (ASTM D149) volts/mil	350	350	350	350	340	300	350
Maximum continuous service temperature Fwet	120	120	120	120	120	120	120
Maximum continuous service temperature Fdv	180	180	180	180	180	180	180

Morro	4 Tabor U.10 urbool (mg/1000 rounlytions @1000 gram load)	5 Dun to columnt loca

Key: Excellent Very Good Fair Poor

					noj.	very cood	
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% Sulfuric 50% Phosphoric 10%	○ 0 0 0 0 0	0000		○ 0 0 0 0 0	0000	• • • •	<ul><li>∅</li><li>0</li><li>0</li><li>0</li><li>0</li></ul>
ALCOHOLS Methanol Isopropanol	0	0	0	0	0	0	<b>⊗</b>
KETONES Acetone Methyl ethyl ketone	0	0	0	0	0	0 0	<b>⊗</b> <b>⊗</b>
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0	0	0	0	0	0	0
HYDROCARBONS Gasoline (unleaded) Mineral spirits	0	0	0	0	0	0	0 0
SALTS Sodium chloride Trisodium phosphate Aluminum sulfate 10% Sodium carbonate 10%	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0





















#### 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 only 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)	Titanium Putty	Magic Bond	Wear Guard High-Temp / High Impact	Ceramic Repair Putty	Brushable Ceramic	Wear Guard High- Load, Fine Load / Combo Wear	Plastic Steel B Aluminum F2	Stainless Steel Putty ST	Underwater Repair Putty
Acid Resistant Coating						_	_				
Casting Repair											
Chemical Resistant Products / Coatings			_								
Chocking, Leveling Compound											
Coating (Impact, Abrasion)			_								
Condenser Tube Sheet Coating											
Corrosion Resistant Coating											
Cyclones											
Epoxy (Fast-Cure Repairs)											
Fans / Exhauster Fan Blades											
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											
Shaft Repairs											
Tank Linings											
Tank Repairs (Holes)				_							
Valve Rebuild / Repairs											
Wet / Damp Surface Bonding											

















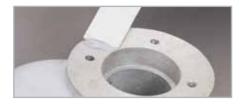




#### The Key to Successful Repairs

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

SURFACE PREPARATION



#### **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 quidelines.



#### 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 quidelines.
- 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.





If you have questions, please contact Devcon Technical Service:

1-800-933-8266























#### **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® (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. It qualifies under DoD Specification DoD-C-24176B SH, Type 1.

Item # Container Size

1 lb 10110 10120

10130 25 lb

#### Devcon® Plastic Steel® 5 Minute® (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.

Container Size 10240 1 lb



Aluminum-filled epoxy putty for dependable nonrusting repairs to aluminum castings, machinery, and equipment. It is widely used in HVAC applications and qualifies under DoD Specification DoD-C-24176B, Type 2.

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. Qualifies under DoD Specification DoD-C-24176B SH, Type 1.

Container Size Item #

10760 1 lb 10770 2 lb



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. Qualifies under DoD Specification DoD-C-24176B SH, Type 1.

Item # Container Size 11700 3 lb

#### **Devcon® Wear Resistant Epoxy (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 3 lb

11420



Physical Properties	Plastic Steel® (A)	Plastic Steel® 5 Minute® Putty (SF)	Aluminum Putty	Stainless Steel Putty (ST)	Bronze Putty (BR)	Titanium Putty	Ceramic Repair Putty	Wear Resistant Epoxy (WR-2)
Color	Dark Grey	Dark Grey	Aluminum	Grey	Bronze	Grey	Dark Blue	Dark Grey
Mix ratio by weight / volume (resin:hardener)	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	9:1 / 4:1
Mixed viscosity cps	Putty	Putty	Putty	Putty	Putty	Putty	Putty	Putty
Functional cure hours	16	1	16	16	16	16	16	16
Pot life minutes @ 75 F	45	5	60	58	35	21	25	60
Specific volume inches³/pound	11.9	12.2	17.5	12.4	12.4	11.7	16.4	13.9
Coverage per pound inches @ 1/4" thickness	48	49	70	50	50	47	66	56
Cured hardness (ASTM D2240) Shore D	85	85	85	85	85	87	90	85
Cured shrinkage (ASTM D2566) inch/inch	0.0006	0.0006	0.0008	0.0010	0.0010	0.0010	0.0022	0.0005
Adhesive tensile shear (ASTM D1002) psi	2800	2026	2600	2385	2680	2000	2000	2200
Tensile strength (ASTM D638) psi	3220	3100	3680	3340	2640	4000	3900	4300
Compressive strength (ASTM D695) psi	8260	10,400	8420	8400	8540	18,800	12,700	9800
Flexural strength (ASTM D790) psi	5600	7680	6760	5280	6180	7700	6475	6500
Modulus of elasticity (ASTM D638) psi x 10 <sup>5</sup>	8.5	7.5	8.0	8.0	8.0	9.5	9.0	7.5
Coefficient of thermal expansion (ASTM D696) [(in)/(in x 'F)] x 10 °	48	34	29	34	33	22	17	32
Thermal conductivity (ASTM C177) [(cal x cm)/(sec x cm² x °C)] x 10°3	1.37	2.65	1.73	1.23	1.57	1.95	1.88	1.67
Dielectric constant (ASTM D150) 1 KHz	67.5	35.0	21.4	75.0	75.0	44.8	41.0	6.3
Dielectric strength (ASTM D149) volts/mil	30	30	100	30	25	56	370	400
Maximum continuous service temperature F dry	250	200	250	250	250	350	350	250

Notes: <sup>4</sup> Taber H-18 wheel (mg / 1000 revolutions @ 1000 gram load) <sup>5</sup> Due to solvent loss

Key: Excellent Very Good Fair Poor

						Noy.	ant Very cood	O ruii O re
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	○	0 0	⊗ •• ••	⊗ •• ••	⊗ •• ••	<ul><li>⊗</li><li>•</li><li>•</li></ul>	<ul><li>⊗</li><li>•</li><li>•</li></ul>	∅ 0 0
ALCOHOLS Methanol Isopropanol	0 0	0 0	0	<b>0</b>	0 0	•	•	<b>0</b>
KETONES Acetone Methyl ethyl ketone	0	0 0	0	0	0	0	0	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0	0	0 0	0	0	•	•	0
HYDROCARBONS Gasoline (unleaded) Mineral spirits	0	0	0	0	0	•	•	0
CHLORINATED HYDROCARBONS Perchloroethylene 1-1-1 Trichloroethane	0	0	0	0	0	•	•	0
SALTS Sodium chloride Trisodium phosphate	<b>O</b>	0	0	0	0	•	•	0























## 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.

	J
Item #	Container Size
10210	1 lb
10220	4 lb

25 lb

#### Devcon® FasMetal™

10230

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

Container Size Item # 10780 .75 lb

#### **Devcon® Liquid Release Agent**

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

Container Size Item # 19600 1 pt

#### **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



ABS

Item #

19770

#### **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® HVAC Repair (Special F)

Container Size

6.5 oz

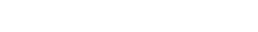
and chen	and chemical attack.							
Item #	<b>Container Size</b>							
11760	2 lb (red)							
11765	2 lb (blue)							
11770	2 lb (white)							







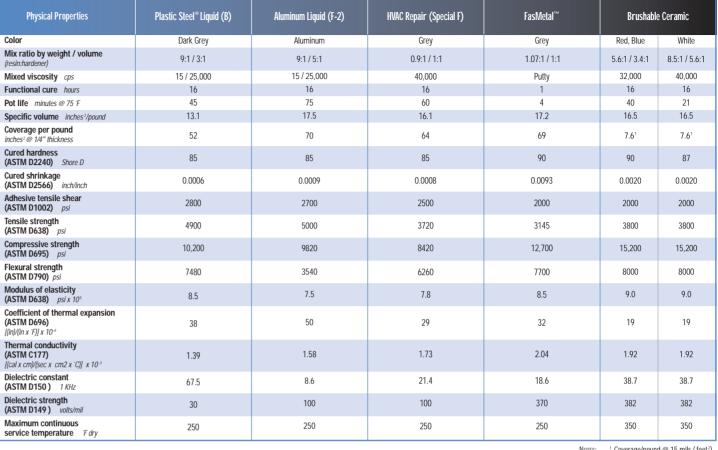
Devcon® Cleaner Blend 300



Safe, multi-purpose, non-trichloroethane based Aluminum-filled epoxy for repairing worn or fatigued degreaser for removing heavy grease and oil from metals. Ideal for repairing copper compressor coils. metal surfaces. Excellent general-purpose degreaser.

> Container Size Item # 19510 1 pt





Notes:	¹ Coverage/nound @ 15 mils (feet²)

■ Excellent ■ Very Good ○ Fair ○ Poor

				, <u> </u>	
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	⊗ • •	⊗ • •	⊗ • •	<b>0</b> 0	⊗ • •
ALCOHOLS Methanol Isopropanol	0	0 0	0 0	0 0	•
KETONES Acetone Methyl ethyl ketone	0 0	0 0	0 0	0 0	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0	0	0 0	0	•
HYDROCARBONS Gasoline (unleaded) Mineral spirits	0	0	0	0	•
CHLORINATED HYDROCARBONS Perchloroethylene 1-1-1 Trichloroethane	0	<b>O</b>	<b>O</b>	0	•
SALTS Sodium chloride Trisodium phosphate	0	0	<b>O</b>	0	•























#### 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 hightemperature 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.

**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® Combo Wear FC (Fast Cure)**

High-tech, three-component compound for quickly repairing processing equipment and returning it to service in as little as 11/2 hours.

Item # Container Size 11450 9 lb

#### **Devcon® Brushable Ceramic**

When applied in a 15-20 mil coating, this epoxy compound produces a smooth, ABS protective barrier against wear, abrasion, corrosion, erosion, and chemical attack.

Container Size Item # 11760 2 lb (red) 11765 2 lb (blue)





#### **Devcon® Carbide Putty**

**Devcon® Tile Adhesive** 

Item # Container Size

20 lb

room temperature.

11495

**Devcon® Backing Compound and** High-Performance Backing Compound

Container Size

and gyratory crushers.

Item#

High-strength epoxy liquid for use in rod, ball,

pebble, and autogenous mills, as well as in cone

Backing Compound 20 lb HP Backing Compound 20 lb

High-strength, trowelable adhesive that cures at

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





Physical Properties	Wear Guard™ High Load	Wear Guard™ High Temp	Wear Guard™ High Impact	Wear Guard™ Fine Load	Combo Wear FC (Fast Cure)	Brushable Ceramic	Backing Compound	High Performance Backing Compound	Tile Adhesive	Carbide Putty
Color	Grey	Grey	Dark Grey	Grey	Grey	Red, Blue	Green / Brown	Red	Light Grey	Grey
Mix ratio by weight / volume (resin:hardener)	2:1 / 2:1	13.7:1 / 6:1	2.5:1	2:1 / 2:1	2:1 / 2:1	5.6:1 /3.4:1	100:6.84 / 9:1	100:5.94 / 9.9:1	1.1:1 / 1:1	8:1 / 4:1
Mixed viscosity cps	Putty	Putty	Putty	Putty	Putty	32,000	4700	10,320	Putty	Putty
Functional cure hours	16	Heat Cured	16	16	8	16	8	8	12	16
Pot life minutes @ 75 F	45	120	45	45	7	40	15	56	240	50
Specific volume inches³/pound	12.9	15.1	12.4	12.4	12.4	16.5	17.2	17.2	19.2	15.9
Coverage per pound inches <sup>2</sup> @ 1/4" thickness	50	60	50	50	50	7.63	349¹	349²	76.8	64
Cured hardness (ASTM D2240) Shore D	87	87	85	87	87	90	92	92	81	85
Cured shrinkage (ASTM D2566) inch/inch	0.0006	0.0010	0.0006	0.0014	0.0005	0.0020	0.0010	0.0006	0.0010	0.0009
Adhesive tensile shear (ASTM D1002) psi	1375	2300	2567	1375	1450	2000	2000	2000	2890	1350
Tensile strength (ASTM D638) psi	4210	4600	4220	4300	4300	3800	5497	7687	2640	2640
Compressive strength (ASTM D695) psi	11,000	13,200	7250	11,000	11,000	15,200	13,880	18,850	9620	8160
Flexural strength (ASTM D790) psi	7140	8220	6144	7190	7140	8000	8558	11,500	5480	5480
Modulus of elasticity (ASTM D638) psi x 10 <sup>5</sup>	8.5	8.5	3.36	8.5	8.0	9.0	9.2	9.5	8.0	8.0
Coefficient of thermal expansion (ASTM D696) [(in)/(in x T)] x 10-6	32	27	34	34	34	19	22	22	14	14
Thermal conductivity (ASTM C177) [[cal x cm]/(sec x cm² x 'C)] x 10-3	1.75	2.14	1.81	1.81	1.75	1.92	N/A	N/A	1.25	1.25
Dielectric constant (ASTM D150) 1 KHz	41.0	38.0	46.0	46.0	41.0	38.7	N/A	N/A	46.0	25.0
Dielectric strength (ASTM D149) volts/mil	340	310	340	340	340	382	N/A	N/A	320	200
Maximum continuous service temperature F dry	300	450	300	300	300	350	250	250	200	250

es:	Coverage / 20.3 pound unit (inches <sup>3</sup> )	2	Coverage / 20.4 pound unit (inches³)	3	Coverage (feet <sup>2</sup> @ 15 mils)

							Key:	Excellent	Very Good	O Fair O Poor
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	∅ • •	<ul><li>⊗</li><li>•</li><li>•</li></ul>	<ul><li>∅</li><li>0</li><li>0</li></ul>	<ul><li>∅</li><li>0</li><li>0</li></ul>	0 0	0 0	<ul><li>○</li><li>●</li><li>○</li></ul>	<b>○ ○ ○</b>	© ••••••••••••••••••••••••••••••••••••	000
ALCOHOLS Methanol Isopropanol	<b>0</b>	00	0	0	0	•	0 0	0	0	0
KETONES Acetone Methyl ethyl ketone	0	0	0	0	<b>⊗ ●</b>	0	0	0	<b>⊗ ●</b>	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	•	•	•	•	•	•	0	0	•	0
HYDROCARBONS Gasoline (unleaded) Mineral spirits	•	•	•	•	0	•	0	0	0	0
CHLORINATED HYDROCARBONS Perchloroethylene 1-1-1 Trichloroethane	0	•	0	0	0	•	<b>⊘</b>	0	0	0
SALTS Sodium chloride Trisodium phosphate	0	•	0	0	0	•	0	0	0	0























Flooring Applications	EC 7000 AR	Floor Patch™	Floor Patch FC™	Ultra Quartz™	Deep Pour Grout™	EC 6500	EC 7000	Epoxy Coat Sealer	Floor Grip™
Acid-Resistant Coating	_			_		_	_	_	
Anchoring Bolts in Concrete					<b>V</b>				
Anti-Skid Floors/Ramps/Docks									_
Chemical Containment Coatings								_	
Chocking Equipment		_	_		_				
Coatings (Impact, Abrasion)									
Expansion Joints									
Floors (Hole-Filling & Patching)									
Leveling Equipment					_				
Leveling Floors					_				
Meat & Poultry Plants		_	_		_	_	_	_	_
Metal Coatings									<b>V</b>
Warehouse Floor Coatings						_			
Wet / Damp Surface Coatings									<b>V</b>

Physical Properties	Floor Patch™	Floor Patch FC (Fast Cure)	Ultra Quartz ™	Deep Pour Grout™	Epoxy Coat™ 7000 Non VOC	Epoxy Coat™ 7000 AR (Acid Resistant)	Epoxy Coat™ 6500 Non VOC	Epoxy Concrete Sealer	Concrete Primer 1000	Floor Grip™	Z° Cold Galvanizing
Coverage per unit feet 2 @ thickness	18 @ . 25" / 40 lb unit	4.5@.25" / 10 lb unit	13 @ . 25" / 35 lb unit	715 inches³/ unit	400 @ 8 mils	200 @ 16 mils	600 @ 8 mils	400 @ 8 mils	400 @ 8 mils	100 @ 16 mils	400 @ 4 mils
Mixed viscosity cps	Putty	Putty	Putty	13,000	2000	3600	3000	2000	2000	2000	2000
Minimum application temperature $^{\circ\mathcal{F}}$	60 ~ 90	60 ~ 90	60 ~ 90	50 ~ 90	55 ~ 90	60 ~ 90	50 ~ 90	40 ~ 90	60 ~ 90	40 ~ 90	50 ~ 90
Pot life minutes @ 75 °F	45	15	60	40	55	36	45	60	55	50	N/A
Functional cure hours	16	3	16	16	24	24	24	24	24	24	24
Cured hardness (ASTM D2240) Shore D	85	85	95	87	85	85	82	85	85	85	N/A
Maximum continuous service temperature °F	250	250	250	180	180	200	185	180	180	250	400
% Solids	100	100	100	100	100	100	100	100	100	100	90

								Key: Exce	ellent 🕕 Very	Good O Fair	O Poor
Chemical Resistance											
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	∅ 0 0	<ul><li>∅</li><li>0</li><li>0</li></ul>	<ul><li>⊗</li><li>•</li><li>•</li></ul>	<ul><li>∅</li><li>0</li><li>0</li></ul>	<ul><li>∅</li><li>0</li><li>0</li></ul>	<ul><li>∅</li><li>•</li></ul>	<ul><li>∅</li><li>0</li><li>0</li></ul>	<ul><li>∅</li><li>0</li><li>0</li></ul>	<ul><li>∅</li><li>0</li><li>0</li></ul>	<ul><li>∅</li><li>0</li><li>0</li></ul>	<ul><li>○</li><li>0</li><li>0</li></ul>
ALCOHOLS Methanol Isopropanol	0	0	•	0	0	0	0	0 0	0	00	<b>O</b>
KETONES Acetone Methyl ethyl ketone	00	0	0	0	0	0	0	0	0	00	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0	0	•	0	•	0	0	0	0	0	<b>D</b>
HYDROCARBONS Gasoline (unleaded) Mineral spirits	<b>O</b>	0	•	0	0	•	0	0	0	0	<b>O</b>
CHLORINATED HYDROCARBONS Perchloroethylene 1-1-1 Trichloroethane	0 0	0	•	0	0	0	00	•	•	•	00
SALTS Sodium chloride Trisodium phosphate	•	•	•	0	0	•	0	0	0	0	0





















#### Floor Repair/Patching Compounds

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

#### Devcon® Floor Patch®

All-purpose, easy-to-mix and apply concrete patching compound. With a compressive strength of 8000 psi, Floor Patch provides three times the typical strength of concrete.

 Item #
 Container Size

 13100
 10 lb

 13120
 40 lb

#### **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® 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 (3.5 gal kit)



#### Floor Primers and Anti-Skid Additives

These coatings and additives are used to prime surfaces before topcoating with Devcon floor coatings and to produce anti-slip surfaces for worker safety.

#### **Devcon® Concrete Primer 1000**

Non-VOC primer penetrates, seals, and protects shot-blasted or acid-etched concrete surfaces prior to the application of Floor Savers™ coatings. Improves adhesion of top coating.

Item # Container Size 12400 2 gal

#### Devcon® Safe-T-Grit™

Additive that can be mixed into any Floor Savers<sup>™</sup> product to produce a nonskid surface. Stays in suspensions and prevents accidental slips and falls.

Item # Container Size 12570 2 lb

#### **Devcon® Floor Grip™**

Heavy-duty epoxy compound with silicone carbide granules produces an exceptional nonskid 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°E.

Item # Container Size 13090 2 gal

#### **Devcon® Z® Cold Galvanizing**

95% zinc suspension protects iron and steel from rust and corrosion in both above ground or underground applications. Easily applied by brush, roller, or spray, it provides excellent resistance to water, chemicals, and hydrocarbons. Z Cold Galvanizing qualifies under DOD Spec DOD-P-21035.

Item # Container Size
12020 1 gt

12020 1 qt 12030 1 gal

## Floor Coatings

These epoxy floor coatings are used to protect plant floors, platforms, walkways, and ramps. They provide excellent protection against solvents, acids, and alkalis.

#### 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.

Novolac non-VOC epoxy coating provides superior

resistance to concentrated acids (including 98%

sulfuric) and chemicals. Excellent adhesion to

Item # Container Size 12710 2 gal

(Acid Resistant)

**Devcon® Epoxy Coat™ 7000 AR** 



chemical-resistant. Convenient 3-gallon containers for large coating jobs.

Item # Container Size 12875 3 gal

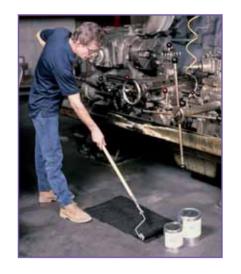
#### **Devcon® Epoxy Concrete Sealer**

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



Devcon® Epoxy Coat™ Coatings Color: Grey





# concrete surfaces. Ideal for use around chemical storage tanks, dike walls, and containment areas.

#### Item # Container Size 12750 2 gal





















#### **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 waterproof 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**

Itom # Containor Sizo

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

ItCIII π	Container Size
48000	Bag 25 lb
48050	Mitey-Pak™ 7lb dispense
49100	Sock 3" diameter v 42"



Physical Properties	Magic Bond™ Epoxy Putty	Zip Patch™	Underwater Repair Putty (UW)
Color	Light Grey	Brown	Grey
Mix ratio by weight / volume (resin:hardener)	N/A	N/A	1.4:1 / 1:1
Mixed viscosity cps	Putty	17,000	Putty
Functional cure hours	1	1	24
Pot life minutes @ 75 'F	20	5	45
Specific volume inches³/pound	15.3	N/A	17.0
Coverage per pound inches²@ 1/4" thickness	61	N/A	68
Cured hardness (ASTM D2240) Shore D	83	70	82
Cured shrinkage (ASTM D2566) inch/inch	0.0030	0.0010	0.0020
Adhesive tensile shear (ASTM D1002) psi	920	2400	2685
Tensile strength (ASTM D638) psi	2450	10,000	2760
Compressive strength (ASTM D695) psi	12,000	N/A	5625
Flexural strength (ASTM D790) psi	4280	19,000	4990
Modulus of elasticity (ASTM D638) psi x 10 <sup>5</sup>	7.0	2.9	7.5
Coefficient of thermal expansion (ASTM D696) [(in)/(in x F)] x 10 <sup>6</sup>	21	64	18
Thermal conductivity (ASTM C177) [(cal x cm)/(sec x cm² x °C)] x 10°3	1.24	1.71	1.41
Dielectric constant (ASTM D150) 1 KHz	28.1	43.5	8.6
Dielectric strength (ASTM D149) volts/mil	300	250	150
Maximum continuous service temperature F dry	250	200	250

	Key:	Excellent	od O Fair O Poor
Chemical Properties			
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	000	⊗ • •	000
ALCOHOLS Methanol Isopropanol	<b>0</b>	<b>0</b>	0 0
KETONES Acetone Methyl ethyl ketone	0 0	0	0 0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0	0 0	0
HYDROCARBONS Gasoline (unleaded) Mineral spirits	0	<b>0</b> ⊗	0
CHLORINATED HYDROCARBONS Perchloroethylene 1-1-1 Trichloroethane	0	0 0	0
SALTS Sodium chloride Trisodium phosphate	0	0	0

#### 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. Inert, will not evaporate or harden in extreme temperatures. Salt, corrosion and moisture resistant. Temperature range -60°F to 1600°F (-51°C to 871°C). Non-aerosol version meets Mil Spec A-907. ▲ NFPA FIre Code 30B: Level 3 (aerosol)

4010301)			
tem#	Container Size	P/N	÷
)9175	5 g pouch, display boxed	09175	31875
31343	1 oz carded tube	133AR	
30071	4 oz brush-top bottle	80071	80558
30078	8 oz brush-top bottle	133K	
31464	12 oz aerosol can, 8.5 oz net wt	133MA	
30208	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 1800°F (-34°C to 982°C). Provides good electrical conductivity. Meets Mil Spec A-907.

tem#	Container Size	P/N	•	
09128	8 oz brush-top bottle	09128	09127	
31163	16 oz brush-top bottle	31163	09124	

#### Permatex® Food Grade **Anti-Seize Lubricant**

A non-drying, non-metallic, PTFE fortified syntheticbased lubricant that is NSF registered H1, and Kosher approved. Protects metal parts from rust, corrosion, seizing and galling up to 900°F (482°C). Use on threaded connections to lubricate, seal and prevent galling, wear and friction. Also lubricates machine parts, press fits, shafts, and more. Effective on stainless steel, aluminum, iron, galvanized copper, brass, plastic and fiberglass.

Item # Container Size 82448 8 oz brush-top bottle 82448

#### Permatex® Nickel Anti-Seize Lubricant

Protects metal parts from seizing and galling at temperatures up to 2400°F (1316°C). Copper-free, use under conditions of extreme pressure and temperature, and with stainless steel, titanium and nickel alloys.

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

## 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 2400°F (1316°C).

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

#### Permatex® Fast Break® Super Penetrant

Heavy-duty penetrant for rusted and frozen assemblies. Works quickly to penetrate and loosen rust, tar, grease, dirt, carbon deposits and corrosion from metal parts. Frees frozen nuts, bolts and fittings in all types of assemblies. 

A NFPA Fire Code 30B: Level 3

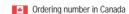
Item #	Container Size	P/N
80052	16 oz aerosol can,	68DA
	12 oz net wt	

#### **Permatex® Dielectric Tune-Up 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.

tem #	Container Size	P/N	*
9180	5 g pouch, boxed	09180	31880
2058	3 oz tube, carded	22058	22064

















#### Gasket Sealants

## 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	*
80008	3 oz tube, carded	1BR	80493
80003	11 oz tube, boxed	1C	

## 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	•
80015	1.5 oz tube, carded	2AR	81348
80016	3 oz tube, carded	2BR	80500
80011	11 oz tube, boxed	2C	80495

#### 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	*
80019	4 oz bottle	3H	80501
80017	16 oz bottle	3D	80502

# Permatex® 1372 High Temperature Form-A-Gasket® Sealant

Slow setting, non-hardening, high temperature sealant. Especially recommended for heavy-duty applications. Temperature range -65°F (-54°C) to 600°F (315°C) intermittent. Resists common shop fluids.

Item #	Container Size	P/N
80088	7 fl oz tube, boxed	8008

#### Permatex® High Tack™ 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.

Item #	Container Size	P/N
80063	16 oz brush-top can	98D

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

9 oz net wt

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

em#	Container Size	P/N	*
104E	12 oz porocol can	001/10	00E4







#### **Gasket Removers**

#### Permatex® Gasket Remover

Removes gaskets from any type of assembly in 10 to 12 minutes. Prepares metal parts for new gasket maker and assembly. Reduces scraping and sanding of baked on gaskets. Prevents damage to flanges. "Not for sale in California". 

NFPA Fire Code 30B: Level 2

Item #	Container Size	P/N	*
80646	16 oz aerosol can,	4MA	80579
	12 oz net wt		





Ordering number in Canada













Ordering number in Canada









49

#### Permatex® Cleaners

Permatex® offers application-specific cleaners and degreasers to meet your needs.

#### **Permatex® Electrical Contact Cleaner**

Ideal for removing grease, oil and other surface contaminants from sensitive electrical and electronic parts to prevent contact failure. This nonflammable, nonconductive and noncorrosive cleaner dries without streaking with no rinsing required. Contains no harmful ozone-depleting HCFCs and is safe on all metal surfaces and many plastics. "Not for sale in California". A NFPA Fire Code 30B: Level 3

Item #	Container Size	P/N
24378	16 oz aerosol can,	24378
	15 oz net wt	

## Permatex® Enviro-safe® ODC-Free Cleaner/Degreaser

A non-aqueous, hydrocarbon-based solvent designed for general-purpose industrial cleaning. Safe on most materials including aluminum, rubber and most plastics. Effective on lubricating oils and greases. Will not cause flash rusting on watersensitive parts. Dries residue free. Contains no ozone-depleting compounds. A NFPA Fire Code 30B: Level 3

Item #	Container Size	P/N
22355	20 oz aerosol can, 15 oz net wt	22355

#### Permatex® Pro-Strength Brake & Parts Cleaner

Aggressively penetrates, dissolves, and removes oil, grease, and brake fluid. Dries fast with no residue. Contains no ODCs. "Not for sale in California".

NFPA Fire Code 30B: Level 1

Item #	Container Size	P/N	*
82606	20 oz aerosol can,	82606	29214
	19 oz net wt		

## Permatex® Non-Chlorinated Brake & Parts Cleaner

Penetrates, dissolves and removes dirt and oil from brake systems and metal parts. Safer for aluminum. Leaves no contaminant-attracting residue or chlorinated solvent run-off. Helps manage EPA halide limits. 

A NFPA Fire Code 30B: Level 3

Item #	Container Size	P/N
82220	20 oz aerosol can,	82220
	14.5 oz net wt	



#### Permatex® Plastic Cleaner

A white, creamy liquid for cleaning and polishing acrylic and other plastic surfaces. Adds new life to plastics, fiberglass, Formica®, acrylics and glass without scratching. Removes dirt, grease and stains. Forms a water-repellent, anti-static shield which resists fogging. Cleans and polishes enameled surfaces, ceramics and stainless steel. Contains no ozone depleting compounds. Conforms to federal specifications P-P 560 Type I.

Item #Container SizeP/N8018316 fl oz spout-top can403D

## Specialty 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	
80038	.75 fl oz tube	35V	80518

#### Permatex® Heavy Duty Rubberized Undercoating

Now with an improved formula! Rubberized for maximum durability; seals, protects and insulates. Excellent professional blend all-purpose coating.

• NFPA Fire Code 30B: Level 3

Item #	Container Size	P/N
81833	20 oz aerosol can,	135EA
	16 oz net wt	

# Permatex® Rust Treatment Provides one-step rust treatment that destroys old rust, prevents new rust. Just brush or spray it on. Within minutes, rust disappears and a durable black polymer coating develops. Contains a tough protective primer that protects metal surface until painted. Item # Container Size P/N



75448

1 gallon bottle















#### Permatex® Hand Cleaners



Ordering number in Canada

#### 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	P/N	*
25108	7.5 fl oz bottle	25-108	20857
25116	15 fl oz squeeze bottle	25-116	20859
25217	1/2 gallon bottle w/pump	25-217	25519
25218	1 gallon bottle w/pump	25-218	20861
25104†	1 gallon flat-top bottle	25-104	

#### **Smooth Lotion**

Item #	Container Size	P/N	4
23108	7.5 fl oz bottle	23-108	20851
23116	15 fl oz squeeze bottle	23-116	20853
23217	1/2 gallon bottle w/pump	23-217	25520
23218	1 gallon bottle w/pump	23-218	20855
23104†	1 gallon flat-top bottle	23-104	20850



❖ Biodegradable according to 40 CFR 796.3240. † For use with 95140 Universal Dispenser. 
☐ Ordering number in Canada



#### Permatex® Fast Orange® **Cream Formula Hand Cleaner**

HAND CLEANERS

A cream version of the #1 selling Fast Orange® Lotion Hand Cleaner, Pure, fresh-smelling, natural citrus power cleans deep down to remove even the most stubborn grease and grime. Readily biodegradable, non-toxic and petroleum solvent-free. Fast Orange® Cream was formulated for those who prefer a thicker consistency hand cleaner. Fortified with premium skin conditioners.

ltem #	Container Size	P/N	
35406†	pumice, 4.5 lb container	35-406	

#### 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	P/N
25072	72-count bucket	25072

#### **DL® Permatex® Blue Label™ Cream Hand Cleaner**

Cream formula waterless hand cleaner. Takes off many difficult to remove substances vet is gentle to hands. Does not leave a greasy feeling after use. The 4.5 lb can fits most dispensers including DL® Permatex® 95140.

Item #	<b>Container Size</b>	P/N	*
01013	14 oz plastic tub	01-013	20833
01406†	4.5 lb plastic tub	01-406	20835

#### Parr® Painter's Clean™ Hand Cleaner

A safer alternative to harsh, drving and potentially toxic solvents and thinners. Fortified with four premium skin conditioners, this freshly-scented, fine pumice formula quickly removes the toughest paints, stains and varnishes. Readily biodegradable. nontoxic and nonflammable, Painter's Clean™ Hand Cleaner has the muscle to clean where most hand cleaners fall short.

Item #	Container Size	P/N	*
65116	15 fl oz bottle w/nail brush	65-116	20870
65217	60 fl oz w/pump	65-217	22480

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

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

Item #	Container Size	P/N
21218	1 gallon bottle	21-218
	w/pump, lotion	

#### **Universal Dispenser**

The 95140 Universal dispenser allows for metered use of all Permatex® Hand Cleaners in the professional size containers noted with an †. Consistently controls the amount of hand cleaner dispensed, cutting down on unnecessary waste. Designed to offer years of trouble-free, repeated use.

Item #	Container Size	P/N
95140	universal dispenser	95-140



#### **Wall-Mounted Wire Bracket**

Convenient wall-mounted wire bracket for out-ofthe-way storage of your favorite gallon of Permatex®

Item #	<b>Container Size</b>	P/N		
90128	wire bracket	90128		



† For use with 95140 Universal Dispenser.

#### Gloves

#### **Permatex® Disposable Nitrile Gloves**

Permatex® Nitrile Disposable Gloves are made from a 100% synthetic rubber that provides superior resistance to a wide range of solvents and hazardous chemicals. Suitable for users with natural rubber latex sensitivity. They are fully textured to provide a secure grip on dirty parts and tools. Gloves are lightly powdered, which makes them easier to put on and take off. When superior chemical resistance is required, Nitrile Disposable Gloves provide users with ideal heavy-duty hand protection.

Item #	Container Size	P/N
09185	100-ct. Box - Large	09185
09186	100-ct. Box - X-Large	09186





Ordering number in Canada

• This product is not intended to protect against all chemical compounds.





















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0917818	11700 36	1434010	1810114	2431018	4046112	5920121	8005023	9012853
0917918	11760 38	1434510	18105 14	24325 18	4065012	5922521	80052 47	9514053
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1BR 48	12020 45	1436310	1820114	2510452	4116112	6BR27	8007847	DA03310
1C48	1203045	1436610	18205 14	2510852	4165012	6C 27	80088 49	DA03410
14D22	1240045	1436710	18206 14	2511652	41661 12	6MA 27	8018350	DA0396
14H22	1256044	1438510	1821014	25217 52	4205012	66BR 23	80208 47	DA0406
16BR 23	1257045	1439010	1830014	2521852	4206112	66C23	80628 27	DA0416
16C23	1271044	1440015	18301 14	25224 26	4264012	68DA 47	8063222	DA0426
101BR 26	1275044	14405 15	18305 14	26201 18	4305012	6090120	8063322	DA0476
118DA23	1287544	14407 15	1830614	2621018	4306112	6091020	80646 49	DA0486
133AR47	13090 45	14409 15	1840114	26225 18	4400112	60925 20	80855 23	DA0516
133K 47	1310044	14410 15	18402 14	2625018	4400212	6095020	8115823	DA0526
133MA47	1311044	144156	19266 22	27005 19	44044 12	61608 22	81160 27	DA070 30
135EA50	1312044	145009	19267 22	2701019	4404512	6161622	8117323	DA0916
1005040	1355044	14501 9	19268 22	2710118	44046 12	61708 22	81343 47	DA1126
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1013036	142006	146306	19770 38	2720118	4495012	6205020	81725 26	DA29010
1021038	142106	147008	2AR 48	2721018	4495512	6245 23	8173123	DA29110
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1024036	142516	14900 9	26BR 27	2770118	4606112	65217 53	81860 27	DA2976
1026036	142556	15000 30	26027	27710 18	4800046	66050 20	81878 26	DA30510
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11480 40	143156	15980 30	2420118	4MA 49	5652521	8001748	8586027	I















**MSDS** 

Warranty







