







PRODUCT CATALOG

855-489-7262











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Product Capabilities

ITW Performance Polymers offers a wide range of products to mining, coal-fired power, alternative energy (wind), transportation, marine, composites, engineered construction and general industrial markets. Our products are designed to reduce customers' costs by eliminating steps in their manufacturing processes, reducing the number of parts in an assembly or improving the quality of customers' assembled finished goods. The development of such products is accomplished by working through the voice of our customers.

Mining, Coal-Fired Power, Aggregate and Industrial

- Reduce maintenance/repair/energy costs
- · Extend maintenance intervals
- · Excellent sliding abrasion resistance
- Prolong equipment of scrubbers, pipe elbows, cyclones, chutes, bins and hoppers
- · Protect fan blades, float cells, screw conveyors and augers

Alternative Energy, Transportation, Marine, Composites, Engineered Construction and General Industrial

- · High impact resistance, flexibility, and durability
- · Ease of use
- · Reduced cycle times
- · Patented MMA technology and service
- · Sprayable coring materials and barrier coats
- Sprayable filler/primers for use on many substrates
- · Polyester adhesive putties for filling and bonding
- Sprayable mold and plug building materials
- · Brushable and sprayable radius materials









Services and Support

The answer is in our advanced adhesive and sealant technologies. The ITW Performance Polymers team understands how demanding today's production environments can be; that's why we take pride in providing you with options and innovative solutions, regardless of the industry. We will use our experience and support teams to help you make the right choices for you and your business.

- Test programs and support to aid in the understanding of how our products will behave on your substrates.
- · Technical and sales support with guidance in product selection, application & dispense methods and equipment support.
- Access to the global distribution network via ITW and our strategic partners. Our customers have the ability to obtain quality ITW Performance
 Polymers branded products and services around the world. The ITW Performance Polymers team understands the challenges presented by the
 modern production environment and are always available to demonstrate the wide range of bonding products for your applications.

Methacrylate Structural Adhesives



STRUCTURAL ADHESIVES (1:1)

Product	Description	Color	Mix Ratio By Vol.	Viscosity, cP	Working Time (min)	Fixture Time (min)	Tensile Strength (psi)	Tensile Elongation (%)	Shear Strength (psi)	Gap Fill (inches)
MA300	All Purpose, High Strength	Mixed Color/ Straw, Black	1:1	A: 40,000-70,000 B: 40,000-70,000	3-6	12-15	3,000-4,000	5-15	3,000-3,800	0.03 - 0.125
MA310	High Strength Use With "Difficult To Bond" Plastics	Mixed Color/ Straw	1:1	A: 40,000-70,000 B: 40,000-70,000	15-18	45-55	3,500-4,500	5-15	3,000-3,500	0.03-0.125
MA330	Use With "Difficult To Bond" Plastics	Gray	1:1	A: 40,000-70,000 B: 40,000-70,000	15-18	30-45	3,500-4,500	5-15	3,000-3,500	0.03-0.125
MA530	All Purpose, High Strength/ High Toughness, Medium Open Time	Gray, White	1:1	A: 130,000-180,000 B: 160,000-215,000	30-40	90-160	2,500-3,500	90-160	1,600-2,200	0.03 - 0.70
MA560-1	All Purpose, High Strength/ High Toughness, Long Open Time	Gray, White	1:1	A: 145,000-185,000 B: 170,000-205,000	55-70	220-240	2,500-3,000	>130	1,600-2,200	0.03-1
MA590	All Purpose, High Strength/ High Toughness, Long Open Time	Gray, White	1:1	A: 175,000-220,000 B: 175,000-220,000	90-105	250-380	2,000-2,500	130-160	1,500-2,200	0.03-1.5
MA8110	Bonds metals and dissimilar materials with little to no surface preparation	Gray	1:1	A: 40,000-70,000 B: 40,000-70,000	9-11	35-50	3,100-3,600	10-20	1,800-2,300	0.03 - 0.375
MA8120	Bonds metals and dissimilar materials with little to no surface preparation	Gray	1:1	A: 40,000-70,000 B: 40,000-70,000	18-22	75-90	2,500-3,000	45-65	1,800-2,300	0.03-0.375

Plexus® MA300

A two-part methacrylate adhesive designed for structural bonding of thermoplastic, metal, and composite assemblies. This product offers a combination of high strength and stiffness as well as the ability to bond a wide range of materials.

Mix Ratio by Vol.	Item # (PX)	Size	Items Per Case	Color
1:1	14300	25 ml Twin Cartridge*	12	Mixed Color/Straw
1:1	IT410	50 ml Twin Cartridge*	12	Black
1:1	30500	50 ml Twin Cartridge*	12	Mixed Color/Straw
1:1	IT412	400 ml Twin Cartridge	12	Black
1:1	30000	400 ml Twin Cartridge	12	Mixed Color/Straw
1:1	IT405	5 gal Pail Adhesive	1	Mixed Color/Straw
1:1	IT406	5 gal Pail Activator	1	Mixed Color/Straw
1:1	IT407	50 gal Drum Adhesive	1	Mixed Color/Straw
1:1	IT408	50 gal Drum Activator	1	Mixed Color/Straw

Plexus® MA310

A two-part methacrylate adhesive designed as a medium-curing adhesive system offering a combination of high strength and stiffness as well as the ability to bond a wide range of materials.

Mix Ratio by Vol.	Item # (PX)	Size	Items Per Case	Color
1:1	31500	50 ml Twin Cartridge*	12	Mixed Color/Straw
1:1	31000	400 ml Twin Cartridge	12	Mixed Color/Straw
1:1	IT435	5 gal Pail Adhesive	1	Mixed Color/Straw
1:1	IT406	5 gal Pail Activator	1	Mixed Color/Straw
1:1	IT408	50 gal Drum Activator	1	Mixed Color/Straw
1:1	IT437	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus[®] MA330

A two-part methacrylate adhesive designed for structural bonding of thermoplastic, metal, and composite assemblies. MA330 offers a combination of high strength and stiffness as well as the ability to bond a wide range of materials. Plexus MA330 is gray when mixed.

Mix Ratio by Vol.	Item # (PX)	Size	Items Per Case	Color
1:1	33500	50 ml Twin Cartridge*	12	Gray
1:1	33000	400 ml Twin Cartridge	12	Gray
1:1	IT731	5 gal Pail Adhesive	1	White
1:1	IT732	5 gal Pail Activator	1	Black
1:1	IT741	50 gal Drum Adhesive	1	White
1:1	IT742	50 gal Drum Activator	1	Black

^{*}Filled to approx. 47 ml.

Plexus® MA530

A two-part methacrylate adhesive designed for use on large structures where a moderate open time product is needed. Plexus MA530 may be used for composite and metal bonding for small to large structures. In addition, this product provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness. Plexus MA530 is gray when mixed.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color	
1:1	53000	400 ml Twin Cartridge	12	Gray	
1:1	53500	400 ml Twin Cartridge	12	White	
1:1	IT203	5 gal Pail Adhesive	1	White	
1:1	IT205	5 gal Pail Activator	1	Black	
1:1	IT200	50 gal Drum Adhesive	1	White	
1:1	IT206	50 gal Drum Activator	1	Black	

Plexus® MA560-1

A two-part methacrylate adhesive designed for use on large structures where a long open time product is needed. Plexus MA560-1 is commonly used for bonding stringers and liners into large fiberglass boats with bond lines up to 1" thick. In addition, this product provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness. Plexus MA560-1 is gray when mixed.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color	
1:1	56000	400 ml Twin Cartridge	12	Gray	
1:1	56500	400 ml Twin Cartridge	12	White	
1:1	IT213	5 gal Pail Adhesive	1	White	
1:1	IT219	5 gal Pail Activator	1	Black	
1:1	IT210	50 gal Drum Adhesive	1	White	
1:1	IT211	50 gal Drum Activator	1	Black	

Plexus® MA590

A two-part methacrylate adhesive designed for use on large marine structures where a very long open time product is needed. Plexus MA590 is commonly used for bonding stringers and liners into large fiberglass boats with bond lines up to 1" thick. In addition, this product provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness. Plexus MA590 is gray when mixed.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color	
1:1	59000	400 ml Twin Cartridge	12	Gray	
1:1	IT177	5 gal Pail Adhesive	1	White	
1:1	IT178	5 gal Pail Activator	1	Black	
1:1	IT170	50 gal Drum Adhesive	1	White	
1:1	IT175	50 gal Drum Activator	1	Black	

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Methacrylate Structural Adhesives

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^{*}Surface abrasion required.

Plexus® MA8110

With an open time of approximately 10 minutes, MA8110 an advanced direct-to-metal, low halogen two-part methacrylate structural adhesive. It is designed for the structural bonding of various metals, coatings, plastics, and composite assemblies. MA8110 does a superb job of bonding metals without primers to other metals, engineered thermoplastics, and composite assemblies with little to no surface preparation. Combined at a1:1 ratio by volume, MA8110 can bond not-dip and electrogalvanized zinc steel and other metals to dissimilar substrates. This product provides an exceptional combination of high strength, toughness, environmental resistance, and fatigue endurance, for industrial and transportation assembly. See the Tech. Data Sheet for more details.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
1:1	81100	400 ml Twin Cartridge	12	Gray
1:1	81101	5 gal Pail Adhesive	1	Gray
1:1	81103	5 gal Pail Activator	1	Gray
1:1	81102	50 gal Drum Adhesive	1	Gray
1:1	81104	50 gal Drum Activator	1	Gray

Plexus® MA8120

With an open time of approximately 20 minutes, MA8120 is an advanced direct-to-metal, low halogen two-part methacrylate structural adhesive. It is designed for the structural bonding of various metals, coatings, plastics, and composite assemblies. MA8120 does a superb job of bonding metals without primers to other metals, engineered thermoplastics, and composite assemblies with little to no surface preparation. Combined at a 1:1 ratio by volume, MA8120 can bond hot-dip and electrogalvanized zinc steel and other metals to dissimilar substrates. This product provides an exceptional combination of high strength, toughness, environmental resistance, and fatigue endurance, for industrial and transportation assembly. See the Tech. Data Sheet for more details.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color	
1:1	81200	400 ml Twin Cartridge	12	Gray	
1:1	81101	5 gal Pail Adhesive	1	Gray	
1:1	81203	5 gal Pail Activator	1	Gray	
1:1	81102	50 gal Drum Adhesive	1	Gray	
1:1	81204	50 gal Drum Activator	1	Gray	

DISPENSING EQUIPMENT (1:1)

GUNS

Item #	Description					
14280	Mark V [™] Gun Manual Dispensing Gun 50/35 ml 1:1, 2:1, and 10:1 Ratio Applicator					
30020	Manual Cartridge Dispensing Gun 400 ml 1:1 and 2:1 Ratio Applicator					
30010	Pneumatic Cartridge Dispensing Gun 400 ml 1:1 and 2:1 Ratio Applicator					

NOZZLES

Item #	Description
14285	Mark V™ Mix Nozzle
	50/35 ml 1:1, 2:1, and 10:1 Mix Nozzle
30095	Static Mix Nozzle (500 series) 400 ml 1:1 and 2:1 Mix Nozzle
3333	Static Mix Nozzle 1:1, 2:1 and 10:1 Mix Nozzle

^{*}Filled to approx. 47 ml.

Methacrylate Structural Adhesives



STRUCTURAL ADHESIVES (10:1)

Product	Description	Color	Mix Ratio	Viscosity, cP	Working	Fixture Time	Tensile	Tensile	Shear Strength	Gap Fill
Troudet	Безеприон	COIOI	By Vol.	Viscosity, ci	Time (min)	(min)	Strength (psi)	Elongation (%)	(psi)	(inches)
MA205HV	All Purpose, Fast Cure, Toughened	Blue	10:1	A:100,000-130,000 B: 15,000-50,000	3-5	7-9	2,000-2,500	20-50	1,800-2,500	0.03 - 0.25
MA320	Excellent Low Temperature, Toughness Properties	Mixed Color/Straw, White, Black	10:1	A: 135,000-175,000 B: 30,000-70,000	8-12	25-30	2,000-2,500	100-140	1,500-2,000	0.03 - 0.375
MA420 (A0420)	All Purpose, High Toughness	Mixed Color/Straw, Blue, Black	10:1	A: 100,000-125,000 B: 35,000-80,000	4-6	18-22	2,700-3,000	30-50	3,000-3,800	0.03 - 0.375
MA420FS	Fast Set For Automated Systems	Mixed Color/Straw, Blue, Black	10:1	A: 80,000-100,000 B: 50,000-80,000	1-2	3-4	1,250-1,500	5-15	1,300-1,600	0.03 - 0.125
MA422	All Purpose, Medium Open Time	Mixed Color/ Straw, Blue	10:1	A: 100,000-125,000 B: 35,000-70,000	17-24	35-40	2,700-3,000	75-100	1,600-2,300	0.03 - 0.375
MA425	All Purpose, Long Open Time	Mixed Color/ Straw, Blue	10:1	A: 100,000-125,000 B: 35,000-70,000	30-35	80-90	2,000-2,500	120-140	1,600-2,300	0.03 - 0.375
MA550	Excellent Marine Adhesive, White, UV Stable	White	10:1	A: 130,000-160,000 B: 35,000-70,000	40-50	70-75	2,000-2,500	35-45	1,200-1,800	0.03 - 0.375
MA685	A highly translucent, two-part methacrylate adhesive, with excellent UV resistance. Offer superior adhesion to a variety of plastic materials	Translucent Clear	10:1	A: 180,000 - 240,000 B: 30,000 - 40,000	8-12	15-25	3,500-4,500	>20	1200-1600	0.25
MA830	All Purpose, High Strength/ High Toughness, No Primer Metal Bonding	Gray, Gray GB	10:1	A: 80,000-120,000 B: 35,000-80,000	4-6	15-25	2,000-2,500	30-60	2,000-2,800	0.012 - 0.50
MA832	All Purpose, High Strength/ High Toughness, No Primer Metal Bonding	Gray, Gray GB	10:1	A: 80,000-130,000 B: 35,000-80,000	12-16	55-60	2,700-3,000	30-60	2,000-2,800	0.012 - 0.50
MA920	Low Odor, All Purpose, High Toughness	Mixed Color/Straw, Blue, Gray	10:1	A: 80,000-120,000 B: 40,000-80,000	4-6	15-18	1,700-2,200	80-100	1,500-2,200	0.03 - 0.375
MA1020	Low Shrinkage, Low Odor, All Purpose	Blue	10:1	A: 100,000-130,000 B: 40,000-80,000	4-6	15-20	1,750-2,000	90-110	1,250-1,600	0.03 - 0.375
MA1025	Low Shrinkage, Low Odor, Bond Lines Up To 1" Thick	Blue	10:1	A: 180,000-220,000 B: 35,000-70,000	20-25	40-45	1,700-2,300	90-110	1,200-2,000	0.08 - 1.00
MA2015 White	Excellent UV and Yellowing resistant white adhesive, used for structural bonding composites, metals and thermoplastic assemblies	White	10:1	A: 180,000-220,000 B: 35,000-70,000	12-18	40-50	2,700-3,200	20-40	1,600-2,100	0.03 - 1.5
MA2030 White	Excellent UV and Yellowing resistant white adhesive, used for structural bonding composites, metals and thermoplastic assemblies	White	10:1	A: 180,000-220,000 B: 35,000-70,000	26-34	70-90	2,700-3,200	20-40	1,600-2,600	0.03 - 1.5
MA2030	Non Sag, High Gap Fill, Medium Work Time	Blue	10:1	A: 180,000-220,000 B: 35,000-70,000	25-35	70-90	3,000-3,400	90-125	1,600-2,100	0.03 - 1.5
MA2045	A two methacrylate, Non Sag, with excellent fatigue endurance, outstanding impact resistance, and superior toughness	Blue	10:1	A: 180,000 - 220,000 B: 35,000 - 70,000	40-50	100-130	3,000-3,400	90-125	1,600-2,200	.03 – 1.5
MA2090	Low Exotherm, Bond Lines Up To 1.5" Thick	Blue	10:1	A: 180,000-220,000 B: 35,000-70,000	80-95	190-230	3,000-3,400	90-120	1,600-2,100	0.03 - 1.5

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STRUCTURAL ADHESIVES (10:1)

Plexus® MA205HV

An advanced non-conductive two-part methacrylate adhesive designed for the structural bonding of various electronic assemblies. In addition, MA205HV does a superb job of bonding metals without primers and engineered thermoplastics and composite assemblies with little to no surface preparation. This product provides a unique combination of high-strength, excellent fatigue endurance, outstanding impact resistance, and superior toughness.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color	
10:1	IT025X	490 ml Cartridge	12	Blue	

Plexus® MA320

A two-part methacrylate adhesive designed for composite bonding applications in the transportation, marine, and engineering construction industries because it requires virtually no surface preparation. MA320 provides superior toughness at temperatures below 1.4°F (-17°C).

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	32000BX	490 ml Cartridge	12	Black
10:1	32000X	490 ml Cartridge	12	Mixed Color/Straw
10:1	32000WX	490 ml Cartridge	12	White
10:1	32200	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	32400	5 gal Pail Activator	1	Mixed Color/Straw
10:1	32900	5 gal Pail Activator	1	Black
10:1	35420	5 gal Pail Activator	1	White
10:1	32800	50 gal Drum Adhesive	1	Mixed Color/Straw

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Methacrylate Structural Adhesives

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^{*}Surface abrasion required.

Plexus[®] MA420 (A0420)

A rapid curing two-part methacrylate adhesive designed for composite bonding applications in the transportation industry because it requires virtually no surface preparation. In addition, this product provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness.

Item #	Size	Items Per Case	Color
35701	490 ml Cartridge	12	Black
IT101BX	490 ml Cartridge	12	Blue
IT101X	490 ml Cartridge	12	Mixed Color/Straw
IT102	5 gal Pail Adhesive	1	Mixed Color/Straw
IT103	5 gal Pail Activator	1	Mixed Color/Straw
IT107	5 gal Pail Activator	1	Blue
IT140	5 gal Pail Activator	1	Black
IT100	50 gal Drum Adhesive	1	Mixed Color/Straw
	35701 IT101BX IT101X IT102 IT103 IT107 IT140	35701	35701

Plexus® MA420FS

A two-part methacrylate adhesive designed for structural bonding of thermoplastic, metal, and composite assemblies. Plexus MA420FS is a standard choice for composites automated bonding applications in the transportation industry, because it requires virtually no surface preparation and its rapid fixture time.

Mix Ratio)			
by Vol.	Item #	Size	Items Per Case	Color
10:1	IT800X	490 ml Cartridge	12	Blue
10:1	IT804X	490 ml Cartridge	12	Black
10:1	IT103	5 gal Pail Activator	1	Mixed Color/Straw
10:1	IT107	5 gal Pail Activator	1	Blue
10:1	IT140	5 gal Pail Activator	1	Black
10:1	IT801	50 gal Drum Adhesive	. 1	Mixed Color/Straw

Methacrylate Structural Adhesives



Plexus[®] MA422

A two-part methacrylate adhesive designed for composite bonding applications in the transportation and marine industries because it requires virtually no surface preparation. In addition, this product provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness. Plexus MA422 is blue when mixed. Plexus MA422 is blue when mixed.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	IT133	490 ml Cartridge	12	Blue
10:1	IT132	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	IT159	5 gal Pail Activator	1	Blue

Plexus® MA425

A two-part methacrylate adhesive designed for composite bonding applications in the transportation and marine industries because it requires virtually no surface preparation. In addition, this product provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness. Plexus MA425 is blue when mixed.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	IT151X	490 ml Cartridge	12	Blue
10:1	IT152	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	IT159	5 gal Pail Activator	1	Blue
10:1	IT150	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus® MA550

A two-part methacrylate adhesive designed for secondary bonding applications in the marine industry because it requires virtually no surface preparation. In addition this product provides a unique combination of excellent fatigue endurance, outstanding impact resistance and superior toughness. This adhesive is bright white and UV stable.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	35000X	490 ml Cartridge	12	White
10:1	35420	5 gal Pail Activator	1	White
10:1	35200	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	35800	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus® MA685

A two-part methacrylate adhesive designed for thermoplastic and Thermoset assemblies where a clear adhesive is needed. MA6685 is highly translucent and clear, with excellent UV stability. It offers excellent adhesion to a variety of Plastic materials including cast acrylic and cast/densified polyester, polycarbonate and PMMA. It exhibits high resistance to water, impact, and UV light. Combined with MA685 activator at a 10:1 ratio, it has a working time of 8 to 11 minutes and achieves handling strength in 20 to 25 minutes.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	68505	35 ml Cartridge	12	Translucent, Clear
10:1	68500X	490 ml Cartridge	12	Translucent, Clear

Plexus[®] MA830

A two-part methacrylate adhesive designed for structural bonding of metals without primers. MA830 does a superb job of bonding thermoplastic and composite assemblies with little or no surface preparation. This product provides a unique combination of high strength, excellent fatigue endurance, outstanding impact resistance, and superior toughness.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	IT194	35 ml Cartridge*	25	Gray GB
10:1	IT186X	490 ml Cartridge	12	Grav
10:1	IT187X	490 ml Cartridge	12	Grav GB
10:1	IT185	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	IT262	5 gal Pail Activator	1	Grav
10:1	IT284	5 gal Pail Activator	1	Gray GB
10:1	IT188	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus[®] MA832

An advanced two-part methacrylate adhesive designed for structural bonding of metals without primers. In addition, MA832 does a superb job of bonding thermoplastic and composite assemblies with little to no surface preparation. This product provides a unique combination of high strength, excellent fatigue endurance, outstanding impact resistance, and superior toughness.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	IT332X	490 ml Cartridge	12	Gray
10:1	IT331X	490 ml Cartridge	12	Gray GB
10:1	IT330	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	IT262	5 gal Pail Activator	1	Gray
10:1	IT284	5 gal Pail Activator	1	Gray GB
10:1	IT333	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus[®] MA920

A breakthrough in methacrylate adhesive technology because it combines high strength, excellent fatigue endurance, and outstanding impact resistance into a low odor product. Plexus MA920 requires virtually no surface preparation on most substrates.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	35900X	490 ml Cartridge	12	Blue
10:1	IT103	5 gal Pail Activator	1	Mixed Color/Straw
10:1	IT107	5 gal Pail Activator	1	Blue
10:1	IT140	5 gal Pail Activator	1	Black
10:1	35910	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus® MA1020

A two-part methacrylate adhesive with very low cure shrinkage and very low odor designed for structural bonding because it requires virtually no surface preparation. In addition, this product provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness. Plexus MA1020 is blue when mixed.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	IT222X	490 ml Cartridge	12	Blue
10:1	IT220	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	IT107	5 gal Pail Activator	1	Blue
10:1	IT225	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus® MA1025

A two-part methacrylate adhesive with very low cure shrinkage and very low odor designed for structural bonding in the marine industry because it requires virtually no surface preparation. Plexus MA1025 is designed to be used for bonding stringers and liners into fiberglass boats with bond lines up to 1" thick. Plexus MA1025 is blue when mixed.

Mix Ratio by Vol.	Item #	Size	Items Per Case	Color
10:1	IT232X	490 ml Cartridge	12	Blue
10:1	IT236	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	IT237	5 gal Pail Activator	1	Blue
10:1	IT235	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus® MA2015 White

With an open time of approximately 15 minutes, MA2015W is a two-part methacrylate adhesive formulated as an excellent UV and yellowing resistant white solution. This product was designed for structural bonding of thermoplastic, metal, and composite assemblies in the marine and transportation industries. Combined at a 10:1 ratio, MA2015W requires minimal, or no surface preparation and provides an exceptional combination of fatigue endurance, impact resistance and superior toughness.

Mix Ratio					
by Vol.	Item #	Size	Items Per Case	Color	
10:1	20155	490 ml Cartridge	12	White	

PLEXUS.

Methacrylate Structural Adhesives

Plexus® MA2030 White

With an open time of approximately 30 minutes, MA2230W is a two-part methacrylate adhesive formulated as an excellent UV and yellowing resistant white solution. This product was designed for structural bonding of thermoplastic, metal, and composite assemblies in the marine and transportation industries. Combined at a 10:1 mix ratio, MA2030W requires minimal, or no surface preparation and provides an exceptional combination of fatigue endurance, impact resistance and superior toughness.

Mix Ratio

by Vol.	Item #	Size	Items Per Case	Color	
10:1	20305	490 ml Cartridge	12	White	

Plexus® MA2030

A two-part methacrylate adhesive designed to eliminate problems associated with adhesive sag and slide, even when applied to a vertical surface. In addition, MA2030 does not boil in gaps up to 1.5" thick. Plexus MA2030 is blue when mixed.

Mix Ratio

by Vol.	Item #	Size	Items Per Case	Color
10:1	IT247	5 gal Pail Activator	1	Blue
10:1	IT030	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus[®] MA2045

A two-part methacrylate adhesive designed for structural bonding of composite, thermoplastic, and metal assemblies. MA2045 was uniquely formulated to eliminate problems associated with adhesive sag, slide, and swim when applied to either a horizontal or a vertical surface. In addition, MA2045 does not boil in gaps up to 1.5 inches thick. Combined at a 10:1 ratio at 75°F (24°C), it has a working time of approximately 50 minutes and achieves 500 psi and 1000 psi in approximately 100 and 130 minutes, respectively. As with most other Plexus methacrylate systems, MA2045 requires little-or-no surface preparation. MA2045 provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness.

VI	ix	R	ati	0	

by Vol.	Item #	Size	Items Per Case	Color
10:1	IT248X	490 ml Cartridge	12	Blue
10:1	IT247	5 gal Pail Activator	1	Blue
10:1	IT209	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus® MA2090

A two-part methacrylate adhesive designed for structural bonding of composite, thermoplastic, and metal assemblies. Plexus MA2090 was uniquely formulated to eliminate problems associated with adhesive sag and slide, even when applied to a vertical surface. In addition, MA2090 does not boil in gaps up to 1.5" thick. As with most other Plexus methacrylate systems, MA2090 requires little to no surface preparation. MA2090 provides a unique combination of excellent fatigue endurance, outstanding impact resistance, and superior toughness. Plexus MA2090 is blue when mixed.

Mix Ratio

by Vol.	Item #	Size	Items Per Case	Color
10:1	IT195	5 gal Pail Adhesive	1	Mixed Color/Straw
10:1	IT247	5 gal Pail Activator	1	Blue
10:1	IT221	50 gal Drum Adhesive	1	Mixed Color/Straw

Plexus[®] Cleaner Conditioner PC-120 (same as Devcon[®] Metal Prep 90™)

A chemical cleaner and conditioner designed to improve the long-term bond durability of Plexus adhesives when used for adhering aluminum and stainless steel assemblies. Fast drying at ambient temperatures, parts can be bonded 1 to 3 minutes after the conditioner is applied. Application can be performed by brushing or wiping. Allow the PC-120 to dry slightly before wiping away. Only a thin film of PC-120 is needed. The primer contains a red dye. As long as a red tint is slightly visible on the metal surfaces, sufficient conditioner has been applied. Once the conditioner is dry, the parts are ready to bond. Coverage is about 250 square feet per 500 ml.

Item # Size

IP120 1 quart Bottle Primer/Conditioner

DISPENSING EQUIPMENT (10:1)

GUNS	Item #	Description
	14280	Mark V™ Gun Manual Dispensing Gun 50/35 ml 1:1, 2:1, and 10:1 Ratio Applicator
	30016	Manual Cartridge Dispensing Gun 490 ml 10:1 Ratio Applicator
	30013	Pneumatic Cartridge Dispensing Gun 490 ml 10:1 Ratio Applicator
NOZZLES	Item #	Description
	14285 3333 30076 30077	Mark V [™] Mix Nozzle – 50/35 ml 1:1, 2:1, and 10:1 Mix Nozzle Static Mix Nozzle – 1:1, 2:1 and 10:1 Mix Nozzle Static Mix Nozzle – 490 ml 10:1 Mix Nozzle Mix Nozzle – 490 ml 10:1 Bulk Mix Nozzle (600)

Epoxy Adhesives



EPOXY ADHESIVES

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

OEM Adhesive Selector Guide

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

Devcon[®] 5 Minute[®] Epoxy

Rapid curing, general-purpose adhesive/encapsulant which easily dispenses and mixes in seconds, dries in 15 minutes and reaches functional strength in 1 hour.

Item #	Size	Items Per Case	Dispenser	Nozzle
14250	25 ml Dev-Tube™	24		
14270	50 ml Cartridge	12	14280 (manual)	14285
14210	2.5 oz	24	`	
DA051	400 ml Cartridge	12	14410 (manual)	3333
14200	15 oz	6	`	
14630	9 lb	1		

Devcon[®] 5 Minute[®] Epoxy Gel

Thixotropic, non-migrating gel adhesive with excellent gap filling properties.

Item #	Size	Items Per Case	Dispenser	Nozzle	
14240	25 ml Dev-Tube™	24			
14265	50 ml Cartridge	12	14280 (manual)	14285	
DA052	400 ml Cartridge	12	14410 (manual)	30095	

Devcon® One Minute™ Epoxy Gel

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

Item #	Size	Items Per Case	Dispenser	Nozzle	
14277	50 ml Cartridge	12	14280 (manual)	14285	



Epoxy Adhesives

Physical Properties	5 Minute® Epoxy	5 Minute® Epoxy Gel	One Minute™ Epoxy Gel	10 Minut	te™ Epoxy	2 Ton® Epoxy	Epoxy Plus™ 25	HP 250	Food Grade Pot & Seal
Color	Clear	Opaque	Clear	Black	Clear	Clear	Grey	Straw	White
Mix ratio (resin:hardener)	1:1	1:1	1:1	1:1	1:1	1:1	1:1	2:1	4:1
Mixed viscosity (cP)	10,000	Gel	70,000	90,000	80,000	8,000	70,000	105,000	100,000
Working time¹ (minutes)	3 ~ 6	4 ~ 7	45 sec	10	10	8 ~ 12	25	65	42 @ 75°F
Fixture time ² (minutes)	10 ~ 15	10 ~ 15	1	20	20	30 ~ 35	210	300	10 @ 200°F
Functional cure (minutes)	90	45 ~ 60	30 ~ 45	90	90	120	1,440	1,440	1,500 @ 200°F
Adhesive tensile lap shear (ASTM D1002) ³ (psi)	1,9004	2,500	1 ,600 ⁴	2,400	2,400	2,250	2,750	3,200	1,980
Tensile elongation (%)	5	1	1	5	5	1	20	25	1
Peel strength (pli)	2 ~ 3	2~3	2~3	20 ~ 25	20 ~ 25	2 ~ 3	20 ~ 25	35 ~ 40	2 ~ 3
Impact resistance (ft-lb/in²)	5.5	6.5	4.5	10	10	6.5	10	12	5.2
Maximum dry service temperature (°F)	-40 ~ 200	-40 ~ 200	-40 ~ 200	-67~200	-67~200	-40 ~ 200	-40 ~ 200	-67 ~ 250	-40 - 275

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

Chemical Resistance	5 Minute® Epoxy	5 Minute® Epoxy Gel	One Minute™ Epoxy Gel	10 Minute™ Epoxy	2 Ton® Epoxy	Epoxy Plus™ 25	HP 250	Food Grade Pot & Seal
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	000	000	000	0	000	○00	• •	0
ALCOHOLS Glycol Isopropanol Methanol	000	000	0 00	●	•	0	0	•
KETONES Acetone Methyl ethyl ketone	⊘	⊘	⊗	⊘	0 0	⊘	•	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	⊘	⊘	⊗	⊗	0	0	•	•
HYDROCARBONS Gasoline (unleaded) Mineral spirits Motor oil	•	•		0	•	○ •		
SALTS Sodium chloride Trisodium phosphate	0	0	0	0	0	0	0	•

Key: Excellent Very Good Fair Poor

Devcon® 10 Minute™ Epoxy

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

Item #	Size	Items Per Case	Dispenser	Nozzle
14251	50 ml Cartridge (Clear	12	14280 (manual)	14285
14255	50 ml Cartridge (Black) 12	14280 (manual)	14285

Devcon[®] 2 Ton[®] Epoxy

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

Item #	Size	Items Per Case	Dispenser	Nozzle
14310	25 ml Dev-Tube™	24		
14260	50 ml Cartridge	12	14280 (manual)	14285
14355	400 ml Cartridge	12	14410 (manual)	3333
1/200	O III	4	, ,	

Devcon® Epoxy Plus™ 25

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

Item #	Size	Items Per Case	Dispenser	Nozzle
14278	50 ml Cartridge	12	14280 (manual)	14285
14350	400 ml Cartridge	12	14410 (manual)	30095

Devcon® HP 250

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

Item #	Size	Items Per Case	Dispenser	Nozzle
14315	50 ml Cartridge	12	14280 (manual)	14285
14415	400 ml Cartridge	1	14410 (manual)	30095

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 #	Size	Items Per Case	Dispenser	Nozzle
DA999	400 ml Cartridge	6	15043	15047

Cyanoacrylates/Silicones/Urethanes



Permatex[®] ZipGrip[®] General Purpose Instant Adhesives

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

Item#	Size	Items Per Case	
70144	14 g Bottle	12	
70145	2 g Tube	12	
70213	1/3 oz Bottle	12	
70350	1 oz Bottle	10	
70450	1 oz Bottle	10	

Permatex[®] ZipGrip[®] Toughened Purpose Instant Adhesives

Toughened ethyl versions are modified with elastomeric compounds to improve impact, peel and general toughness of cyanoacrylates.

Item#	Size	Items Per Case	
72161	1 lb Bottle	1	
72250	1 oz Bottle	10	
72261	1 lb Bottle	1	

Devcon[®] Silite[®] Silicone RTV

Single-component sealant for gasketing, sealing, bonding, and weatherproofing applications. Cures at room temperature to a clear, flexible silicone rubber. Can be used to seal window plates, ceramic tile, and bond gaskets. Excellent resistance to a wide range of weather and temperatures ranging from -60° to 450°F (-50° to 232°C). Acceptable for use in meat

and poultry plants. Listed under NSN Stock #8040-01-193-3312, qualifies under MIL-A-46106A, Galv.

Item #	Size	Items Per Case	Color	
17100	3 oz Tube, Boxed	24	Clear	
17150	10.3 oz Cartridge	12	Clear	
17140	10.3 oz Cartridge	12	White	
17130	10.3 oz Cartridge	12	Red	

Product	Item Number	Container Size	Viscosity	Mixed Color	Туре	Gap Filling	Adhesive Tensile Shear	Service Temperature	Cure Speed Steel-Plastic-Rubber
GPE 31	70144 70145	14 g bottle 2 g tube	3 cP	Clear	Ethyl	0.003"	3,200 psi	-65 to 200°F	5-10 / 3-5 / <2 sec
GPE 151	70213	1/3 oz bottle	15 cP	Clear	Ethyl	0.005"	3,200 psi	-65 to 200°F	5-10 / 4-10 / <3 sec
GPE 301	70350	1 oz bottle	30 cP	Clear	Neomer Ethyl	0.004"	3,200 psi	-65 to 200°F	5-12 / 5-13 / <6 sec
GPE 100 ²	70450	1 oz bottle	100 cP	Clear	Ethyl	0.004"	3,200 psi	-65 to 200°F	10-20 / 10-20 / <5 sec
TE 1000 ³	72161	1 lb bottle	1,000 cP	Clear	Ethyl	0.008"	3,700 psi	-65 to 280°F	25-40 / 25-50 / 20-50 sec
TE 2400 ³	72250 72261	1 oz bottle 1 lb bottle	2,400 cP	Clear	Ethyl	0.009"	3,700 psi	-65 to 280°F	40-70 / 25-50 / 25-50 sec

NOTES: 1 Commercial Item Standard A-A-3097, Type II, Class 1 2 Commercial Item Standard A-A-3097, Type II, Class 2 3 Commercial Item Standard A-A-3097, Type II, Class 3

URETHANE ADHESIVES

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



Devcon® Dev-Thane™ 5

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

Item #	Size	Items Per Case	Dispenser	Nozzle
14503	50 ml Cartridge	12	14280 (manual)	14285
14500	400 ml Cartridg	e 10	14410 (manual)	3333

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

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

Chemical Resistance	Dev-Thane [™] 5
ACIDS Acetic 10%	\Diamond
Hydrochloric 10%	0
Sulfuric 10%	U
ALCOHOLS	\circ
Glycol	0
Isopropanol Methanol	
KETONES	0
Acetone	0
Methyl ethyl ketone	0
ALKALIS	\circ
Ammonium hydroxide 20%	
Sodium hydroxide 10%	
HYDROCARBONS	
Gasoline (unleaded) Mineral spirits	
Motor oil	
SALTS	
Sodium chloride	0
Trisodium phosphate	•

Sprayable Syntactic Materials

- · Excellent strength-to-weight ratio
- Labor Savings SprayCore® is applied to a controlled thickness by a single person
- Increase Productivity Fast cure cycle with low exotherm
- Excellent core material that can be applied up to a thickness of ³/₄ inches
- Superior Bonding Strength Excellent bedding material for products such as plywood, balsa, and other coring materials

- · Will not rot like wood cores
- · Stop bulk laminate print through
- Parts have a high impact resistance and high core shear since there is a total chemical bond from the skin coat through to the bulk laminate
- Superior cosmetics and better gloss
- · Build stronger and lighter parts faster



BARRIER COAT

SC 1500-LS

A sprayable premium vinylester barrier coat applied directly behind the gel coat. MEKP catalyst is not included.

Item #	Description	Items Per Case
103993	1500-LS Drum Unlined	1

SC 1800-LS AND 1800-LS BLACK

A sprayable premium vinylester barrier coat applied directly behind the gel coat. MEKP catalyst is not included.

Item #	Description	Items Per Case
103995	1800-LS Light Gray Drum Unlined	1
103975	1800-LS Black Drum Unlined	1

CORING/BULK PRINT BLOCKER

SC 2000-0S and 2000-0S LS

A sprayable resin based matrix filled with multi-sized, hollow microspheres that is VOC compliant. It can be used as a bulk print blocker and a coring material. It makes parts stronger, lighter, improves impact resistance, cosmetics while increasing productivity and profitability; MEKP catalyst is not included.

Item #	Description	Items Per Case	
103927	2000-OS Drum Lined	1	
103827	2000-OS Drum Unlined	1	
103994	2000-05 LS Drum Unlined	1	

SC 2045

A uniquely blended compounded resin that can be used as a coring material or a bulk print blocker to enhance the cosmetic appearance, rigidity and speed of production of fiberglass reinforced plastic products. When used as a fiberglass print barrier, SC 2045 is applied behind the "skin coat" laminate. It greatly reduces the transfer of the fiberglass pattern of the laminates behind the coring material onto the gel coat surface. MEKP catalyst is not included.

Item #	Description	Items Per Case	
103202	SHLD-2045 LS Drum Lined	1	
103211	SHLD-2045 LS Drum Unlined	1	
103412	MR-100 Blowing Agnt	1	

SC 4000 HDT

A multi-functional, high heat distortion, sprayable material for mold building that is VOC compliant. MEKP catalyst is not included.

Item #	Description	Items Per Case	
103979	4000 HDT Drum Unlined	1	

SC 6000

A unique resin matrix that can be used in a variety of ways to enhance the cosmetic appearance, rigidity and speed of production of fiberglass reinforced plastic products. MEKP catalyst is not included.

Item #	Description	Items Per Case
103201	CORE-6000 Drum Lined	1

SC 7315

A unique micro balloon filled resin matrix that can be used in a variety of ways to enhance the cosmetic appearance, rigidity and speed of production of fiberglass reinforced plastic products. It is an attractive alternative to other core materials such as plywood, PVC foams, end-grained balsa and polyester mats. SC 7315 is sprayed into place at the desired thickness and is typically lower in cost than other core materials. MEKP catalyst is not included.

Item #	Description	Items Per Case	
103216	CORE-7315 Drum Unlined	1	
103412	MR-100 Blowing Agnt	1	

RADIUS COMPOUND

SC 900

A ceramic compound resin used to prevent air voids between the gel coat and the fiberglass laminate, most commonly used in tight radii. Works well in open and closed mold processes. MEKP catalyst is not included.

Item #	Description	Items Per Case
103350	900 Drum Unlined	1

SC 1050

A ceramic compound resin used to prevent air voids between the gel coat and the fiberglass laminate, most commonly used in tight radii. MEKP catalyst is not included.

Item #	Description	Items Per Case	
103212	1050-LS Neutral Drum Unlined	1	

SC 1060

A ceramic compound resin used to prevent air voids between the gel coat and the fiberglass laminate, most commonly used in tight radii. MEKP catalyst is not included.

Item #	Description	Items Per Case
103305	1060 5 gal Pail	1

ADHESIVE PUTTIES

SC PDR 6000

Strong, ultra-light (6 lbs/gal) polyester adhesive putty that is primarily used to bond fiberglass parts. MEKP catalyst is not included.

Item #	Description	Items Per Case	
103108	PDR 6000 Slow Drum Lined	1	

SC PDR 9000

A strong, lightweight (9 lbs/gal) polyester adhesive filler that is used to bond fiberglass parts. MEKP catalyst is not included.

Item #	Description	Items Per Case	
103100	PDR 9000 Ultra Fast Drum Lined	1	
103104	PDR 9000 Slow Drum Lined	1	
103109	PDR 9000 Fast Drum Lined	1	
103121	PDR 9000 Slow 5 gal Pail	1	
103130	PDR 9000 Slow Drum Unlined	1	

SC ALPHAFILL LIGHTWEIGHT

A high quality, tack-free, lightweight putty with excellent adhesion to metal, galvanized metal, aluminum, fiberglass and wood. BPO catalyst is not included.

Item #	Description	Items Per Case
100009	AlphaFill 5 gal Pail	1

PLUG BUILDING

SC 2000-HS

A CNC machined, sprayable polyester resin matrix used for plug building. Catalyst is not included.

Item #	Description	Items Per Case
103837	2000-HS Drum Unlined	1

SC 4500

A CNC machined vinylester blend matrix used for plug building. Catalyst is not included.

Item #	Description	Items Per Case
103840	4500 Drum Unlined	1

MOLD BUILDING

SC VELR 4000

A DCPD/vinylester laminating resin. This product is a low shrink resin that rapidly wets out the fiberglass reinforcement and cures uniformly with a low exotherm. MEKP catalyst is not included.

Item #	Description	Items Per Case	
103409	VELR-4000 VE Resin Drum Unlined	1	

SC 4055

A ceramic compounded vinylester/polyester resin blend that was formulated for the production of fiberglass molds. This product will enhance the cosmetic appearance, rigidity and speed of production of fiberglass reinforced molds. MEKP is not included.

Item #	Description	Items Per Case
103404	VE-TOL-4055 Drum Molding Shld Lined	1

SC 4600 HTT

A promoted, vinylester blended premium mold building resin developed for the fabrication of FRP tooling in multiple pull and high temperature applictions.

Item #	Description	Items Per Case
103846	4600 HTT Drum Unlined	1

SC 4700

A high performance, shrink controlled, filled Tooling Resin; it is formulated to reproduce exact shapes of master and a unique low HAP chemistry. SC 4700 is MACT compliant and



meets all current federal regulations regarding emissions.

Item #	Description	Items Per Case
103855	4700 5 gal Pail	1
103850	4700 Drum Unlined	1

SPRAYABLE FILLER

SC ALPHACOAT® 1700 AND ALPHACOAT® 1710

A sprayable two-part polyester based filler/ glazing compound that is VOC compliant. Excellent for application over iron, metal, aluminum, fiberglass, wood, and polyester fillers. MEKP catalyst is not included.

Item #	Description	Items Per Case	
100065	AlphaCoat® 1700 Drum Unlined	1	
100066	AlphaCoat* 1710 Drum Unlined	1	

SPECIALTY PRODUCTS

SC 2000-CM

A sprayable polyester matrix filled with multi-sized, hollow microspheres developed specifically for compression molding. It also can be injected into an empty closed mold cavity to make preform cores. MEKP catalyst is not included.

Item #	Description	Items Per Case
103981	2000 CM Drum Unlined	1

SC 5000

A pourable or injectable syntactic transom coring material. MEKP catalyst is not included.

Item #	Description	Items Per Case	
103865	5000 5 Gal Pail	1	
103866	5000 Drum Unlined	1	



Product Selector Guide

SprayCore_®

Product	Description	Mix Ratio (%)	Preferred Red-Dye Catalyst	Styrene (%)	Approx. Gel Time (min)	Approx. Gel to Peak Range (min)	Density Range (Ibs/gal)	Viscosity (cps)	Peak Exotherm (°F)
BARRIER COA	T								
1500-LS	Fast cure time	1.50 MEKP	HP-90, DHD-9 MEKP-925	22	1-3	3-5	6.20-6.80	4,000-7,000 (HB #4 @ 20rpm)	360-400°
1800-LS 1800-LS Black	Medium cure time	1.50 MEKP	HP-90, DHD-9 MEKP-925	22	3-5	3-7	6.20-6.80	4,000-7,000 (HB #4 @ 20rpm)	360-400°
	PRINT BLOCKER								
2045*	Ceramic compounded resin with a very fast gel and cure cycles; Adjustable high and low densities	1.50 MEKP 2.00 MEKP/ 1.50 MR-100	HP-90	30	4-8 0.5-1.5	5-8 4-8	10.00-10.50 (~8.70-9.14)	3,000-5,000 (RVF #4 @ 20rpm)	250-325° 325-375°
2000-05**	Effectively blocks bulk print through in minimum thickness of .090" and can be used to imbed plywood or other sheet core materials	1.75 -2.25 MEKP	HP-90 DHD-90 MEKP-900	35	2.5-3.5	7-9	5.60-6.00	13,000-15,000 (HB #4 @ 20rpm)	285-345°
2000-0S LS**	Effectively blocks bulk print through in minimum thickness of .090" and can be used to imbed plywood or other sheet core materials	1.75 -2.25 MEKP	HP-90 DHD-90 MEKP-900	27	2.5-3.5	6-9	5.60-6.00	13,000-15,000 (HB #4 @ 20rpm)	285-345°
6000	Economical solution for a variety of applications	1.50 MEKP	HP-90, DHD-9 MEKP-900	31	5-10	15-20	5.80-6.30	13,000-15,000 (RVF #5 @ 20rpm)	200-250
7315*	Unique micro balloon ceramic resin with adjustable low and high densities	1.50 MEKP 2.00 MEKP/ 1.50 MR-100	HP-90	32	4-8 0.5-1.5	6-10 4-8	5.80-6.30 (~4.29-4.67)	10,000-14,000 (RVF #5 @ 20rpm)	300-350
RADIUS COMP	POUND								
900	Longer gel time allows good working time with rollers	1.50 MEKP	HP-90 DHD-9 MEKP-900	25	21-26	21-26	10.80-11.30	20,000-25,000 (RVF #6 @ 20rpm)	250-300°
1050	Can be sprayed and chopped while wet	1.50 MEKP	HP-90 DHD-9 MEKP-900	27	25-35	10-17	10.80-11.30	15,000-20,000 (RVF #6 @ 20rpm)	250-300°
1060	Can be brushed and chopped while wet	1.50 MEKP	HP-90 DHD-9 MEKP-900	30	20-30	10-17	10.80-11.30	25,000-35,000 (RVF #6 @ 20rpm)	250-300°
ADHESIVE PU	ITIES								
PDR 6000	Formulated for slow gel time	1.50 MEKP	DDM-9 MEKP-9 DDM-30	25	75-105	15-30	6.10-6.60	600,000-700,000 (RVF T-E @ 5rpm)	200-250
PDR 9000	Formulated for 3 different gel times	1.50 MEKP	DDM-9 MEKP-9 DDM-30	20	10-20 (Ultrafast) 40-50 (Fast) 80-105 (Slow)	5-15 10-25 25-50	8.70-9.50	Ultrafast: 650,000-750,000 (RVF T-E @ 5rpm) Fast and Slow: 750,000-850,000 (RVF T-E @ 5rpm)	180-250° 180-225° 150-225°
AlphaFill Lightweight	Excellent adhesion and featheredge	2.00 BP0	BP0	15-20	3-5	N/A	9.70	102,000-120,000 (SSA W/T-E Bar @ 5rpm)	N/A
PLUG BUILDIN	G								
2000-HS	Developed for easy routing with CNC equipment	1.75-2.25 MEKP	HP-90 DHD-9 MEKP-900	33	2.5-3.5	7-9	4.80-5.20	16,000-18,000 (HB #4 @ 20rpm)	290-325
4500	High HDT	1.75-2.25 MEKP	HP-90	26	8-13	14-20	5.30-6.00	9,000-15,000 (HB #4 @ 20rpm)	280-320°
MOLD BUILDIN									
4000 HDT	Coring material w/ high heat tolerance when used with MR-100 Blowing Agent****	1.50-2.20 MEKP	HP-9 DHD-9 MEKP 925	29	3-4	5-8	5.25-5.75	12,000-14,000 (HB #4 @ 20rpm)	300-350°
4055***	Can be applied at 20-30 mils directly onto the gelcoat	1.50 MEKP 2.00 MEKP/ 1.50 MR-100	HP-9 DHD-9 MEKP 925	26	8-13	7-13	9.70-10.70	8,000-11,000 (RVF #5 @ 20rpm)	270-305° 325-375°
VELR 4000	Rapidly wets out and cures uniformly with a low exotherm	1.50 MEKP	HP-9 DHD-9 MEKP-925	32	15-25	4-10	8.80-9.20	450-650 (RVF #2 @ 20rpm)	325-375°
4600 HTT	Vinylester blended premium mold building resin	1.50 MEKP	MEKP-925 HP-90 DHD-9	20-24	12-20	20-30	10.40-11.10	7,000-11,000 (RVT #5 @ 2.5/20rpm)	210-255°
4700	High performance shrink controlled filled Tooling Resin	1.50 MEKP	MEKP-900 MEKP-925 MEKP-925H	23	13-30	5-12	12.3-12.8	3,000-4,500 (LVT #3 @ 30rpm)	280-330°
SPRAYABLE FILLER									
AlphaCoat 1700	Extremely fast cure time	2.00 MEKP	MEKP-9H DDM-9	20	3-6	60-90 (Dry to sand)	9.20-9.70	1,200-1,400 (LVT #3 @ 30rpm)	N/A
AlphaCoat 1710	Extremely fast cure time	2.00 MEKP	MEKP-9H DDM-9	20	3-6	60-90 (Dry to sand)	11.75-12.25	1,600-1,850 (LVT #3 @ 30rpm)	N/A
SPECIALTY PRODUCTS									
2000-CM	Developed specifically for compression molding. Makes a product stiffer without adding more fiberglass laminates	1.75-2.25 MEKP	DHD-9, DDM-9 MEKP-900 HP-90	28	20-30	20-30	4.80-5.20	18,000-22,000 (HB #4 @ 20rpm)	>220°
5000	Pourable or injectable syntactic transom coring material	1.00 MEKP	MEKP-9H DDM-9	17	20-30	20-30	8.25-8.75	25,000-35,000 (HB #4 @ 20rpm)	125-160°
						_			

^{*}Can be used with or without the MR-100 Blowing Agent for density weight reduction. **Does not use MR 100 Blowing Agent however, can be used to bed other materials. ***Can be used with MR-100 Blowing Agent for added stiffness. ***Addition of MR-100 Blowing Agent is optional.

Dispensing Equipment

DISPENSING EQUIPMENT

GUNS

Item #	Description
14280	Mark V [™] Gun Manual Dispensing Gun 50/35 ml 1:1, 2:1, and 10:1 Ratio Applicato
30016	Manual Cartridge Dispensing Gun 490 ml 10:1 Ratio Applicator
30020	Manual Cartridge Dispensing Gun 400 ml 1:1 and 2:1 Ratio Applicator
15043	Manual Cartridge Dispensing Gun 400 ml 4:1 Ratio Applicator
30010	Pneumatic Cartridge Dispensing Gun 400 ml 1:1 and 2:1 Ratio Applicator
30013	Pneumatic Cartridge Dispensing Gun 490 ml 10:1 Ratio Applicator







NOZZLES

Item #	Description
14285	Mark V[™] Mix Nozzle 50/35 ml 1:1, 2:1, and 10:1 Mix Nozzle
3333	Static Mix Nozzle 1:1, 2:1 and 10:1 Mix Nozzle
15047	Static Mix Nozzle 4:1 Mix Nozzle
30095	Static Mix Nozzle (500 series) 400 ml 1:1 and 2:1 Mix Nozzle
30076	Static Mix Nozzle 490 ml 10:1 Mix Nozzle
30077	Mix Nozzle 490 ml 10:1 Bulk Mix Nozzle (600)





Approved Equipment ManufacturersFor more information, please contact:

GS Manufacturing 985 W. 18th Street Costa Mesa, CA 92627 Phone: (949) 642-1500 E-mail: gsmfg@pacbell.net

www.gsmfg.com

MVP Corporate Headquarters 10535 Hardin Valley Road Knoxville, TN 37932 Phone: (865) 686-5670 E-mail: info@mvpind.com www.mvpind.com

Surface Preparation



The key to a successful repair is proper preparation and thorough cleaning prior to applying repair products or protective coatings.

General Surface Preparation

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

- 1) Make sure the surface is completely dry. Moisture will adversely affect the strength of the bond to the surface.
- 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 and tech data sheet.

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:

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

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.
- Make repairs as soon as possible after blasting the substrate to avoid oxidation or flash rusting.

Rubber

To properly prepare a rubber surface:

- 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.)
- 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

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 Surface Conditioner (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 Technical Service for a recommendation on primers and surface preparation procedures.

Concrete

To properly prepare a concrete surface:

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

Wet Surfaces

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

To properly repair a wet surface:

- 1) Review the General Surface Preparation guidelines.
- 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.

 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.

Blastrac® is a registered trademark of Blastrac, NA

MRO Product Selector Guide

MRO Product Selector Guide

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





If you have questions, please contact Technical Service: 855-489-7262

Before After



Devcon® DFense Blok™ WEARING COMPOUNDS

Specially formulated wear-resistant epoxy coatings that protect dry materials handling and storage equipment from abrasion, corrosion and wear. The DFense Blok™ product line is truly an advanced epoxy technology with quicker functional cure times and better abrasion resistance.

Devcon® DFense Blok™

A bead-filled epoxy compound formulated to significantly outlast traditional wear and abrasion products while providing superior protection.

- 4X better abrasion resistance than competition
- 7X better drop impact

Item #	Items Per Case	Size	
11330	1	30 lb	

Devcon® DFense Blok™ Fast Cure (FC)

A bead-filled epoxy compound that allows equipment to be returned to service in 2 hours.

- · Non-sagging, good adhesion
- Withstands operating temperature, as high as 300°F

Item #	Items Per Case	Size	
11350	1	9 lb	

Devcon® DFense Blok™ Quick Patch

The only ceramic bead-filled wear and abrasion resistant epoxy for emergency repair.

- · Eliminates down-time with exceptionally fast cure
- Repairs holes, leaks and cracks

Item #	Items Per Case	Size	
11320	6	1 lb	

Devcon® DFense Blok™ Surface Wetting Agent

A thixotropic epoxy gel system that improves the ease of application and cured adhesion properties of DFense $\mathsf{Blok^{TM}}$.

- Zero wait time before applying DFense Blok™
- Orange color for easy visual inspection

Item #	Items Per Case	Size	
11340	2	1 lb	

Devcon[®] DFense Blok[™] Power Mixer

Recommended for most effective way to thoroughly mix DFense Blok™ Wearing Compound.

- Durable steel paddle with three blades;
 2X faster than drill-style mixers
- · Plugs into standard 120V outlet.

Item #	Items Per Case	Size
11301	1	5 gal Mixer









Physical Properties	Devcon [®] DFense Blok™ With Surface Wetting Agent	Devcon [©] DFense Blok™ Fast Cure (FC)	Devcon® DFense Blok™ Quick Patch	Devcon [®] DFense Blok™ Surface Wetting Agent
Color	Grey	Grey	Grey	Orange
Mix ratio by weight/volume (resin:hardener)	2:1/100:45	2:1/2:1	1:1/1:1	2:1/100:44
Mixed viscosity (cP)	Putty	Putty	Putty	Thixotropic Gel
Functional cure (hours)	4-5	2-3	30 minutes	4-5
Pot life (minutes @ 75°F)	25	15	4	12-15
Specific volume (inches³/pound)	12.6	13.5	14.89	24.7
Coverage per pound (inches² @ 1⁄4" thickness)	47	53	60	1,860 @ 12 mils
Cured hardness (ASTM D2240) (Shore D)	77	80	84	71
Cured shrinkage (ASTM D2566) (inch/inch)	0.0005	0.0008	0.0010	N/A
Adhesive tensile shear (ASTM D1002) (psi)	2,616	2,764	2,495	2,616
Compressive strength (ASTM D695) (psi)	7,145	7,178	6,166	5,032
Flexural strength (ASTM D790) (psi)	7,876	7,488	4,880	6,700
Coefficient of thermal expansion (ASTM D696)[(in)/(in x 'F)] x 10°	29	33	31	N/A
Dielectric constant (ASTM D150) (1 kHz)	49	45	51	N/A
Maximum continuous dry service temperature (°F)	300	300	200	300
Maximum continuous wet service temperature (°F)	140	140	N/A	140

Chemical Resistance	Devcon [®] DFense Blok™ With Surface Wetting Agent	Devcon [®] DFense Blok [™] Fast Cure (FC)	Devcon [®] DFense Blok™ Quick Patch	Devcon® DFense Blok™ Surface Wetting Agent
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%		○ •		○●●
ALCOHOLS Methanol Isopropanol	00	∅	00	0
KETONES Acetone Methyl ethyl ketone	0	O	0	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	•	•	•	•
HYDROCARBONS Gasoline (unleaded) Mineral spirits	○	lacktriangle	•	0
CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane	•	•	•	•
SALTS Sodium chloride Trisodium phosphate	O	•	•	O

Key: Excellent Very Good Fair Poor



WEARING COMPOUNDS

Specially formulated wear-resistant epoxy coatings that protect dry materials handling and storage equipment from abrasion, corrosion and wear. These products are trowelable, non-sag putties available in large particulate, high impact, and high temperature formulas.

Devcon® Wear Guard™ Fine Load

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

- Withstands operating temperatures as high as 300°F
- · Outstanding resistance to a wide range of chemicals

Item #	Items Per Case	Size	
11470	1	30 lb	

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".

- Trowels onto overhead or vertical surfaces without sagging
- Ideal for repairing scrubbers, ash handling systems, pipe elbows, screens, and chutes

Item #	Items Per Case	Size	
11490	1	30 lb	

Devcon® Wear Guard™ High Temp

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

- Heat-cured, trowelable system that gives up to 30% improvement over conventional wear compounds
- Withstands continuous service temperatures to 450°F

Item #	Items Per Case	Size	
11480	1	30 lb	

Devcon® Tile Adhesive

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

- Bonds ceramic tile to vertical, curved, and overhead surfaces and repairs loose ceramic tiles
- · Excellent chemical resistance to acids and alkalis

Item #	Items Per Case	Size	
11495	1	20 lb	

Devcon® HV Tile Adhesive

High-strength, trowelable adhesive compound for bonding tile, with a 35 minute working time.

- · High viscosity, great non-sag adhesive
- Fills gaps and joints in crushers prior to backing compounds

Item #	Items Per Case	Size	
11489	1	20 lb	

Plexus® MMA Tile Adhesive

Primeless, high strength, creamy trowelable compound for bonding tile with a 14 minutes working time.

- Non-sag seams tiles to surface in 8 minutes
- Functional cure and back inseam in 1.5 hours

Item #	Items Per Case	Size
11481	1	1 gal Adhesive
11486	1	1 gal Activator





Physical Properties	Devcon [©] Wear Guard™ Fine Load	Devcon [©] Wear Guard™ High Load	Devcon [©] Wear Guard™ High Temp	Devcon [®] Tile Adhesive	Devcon [®] HV Tile Adhesive	Plexus® MMA Tile Adhesive
Color	Grey	Grey	Grey	White	Grey	White
Mix ratio by weight/volume (resin:hardener)	2:1 / 2:1	2:1 / 2:1	13.7:1 / 6:1	1.1:1 / 1:1	1.1:1 / 1:1	1.1:1 / 1:1
Mixed viscosity (cP)	Putty	Putty	Putty	Putty	Putty	Putty
Functional cure (hours)	6-8	6-8	Heat Cured	12	8	1.5
Pot life (minutes @ 75°F)	30	30	120	240	35	14
Specific volume (inches¹/pound)	12.4	12.9	14.3	19.2	19	27.7
Coverage per pound (inches² @ 1/4" thickness)	50	50	60	76.8	76	118
Cured hardness (ASTM D2240) (Shore D)	87	87	87	81	81	60
Cured shrinkage (ASTM D2566) (inch/inch)	0.0006	0.0006	0.0010	0.0010	0.0010	0.005
Adhesive tensile shear (ASTM D1002) (psi)	1,375	1,474	2,300	2,890	1,825	2,458
Compressive strength (ASTM D695) (psi)	11,000	11,000	13,200	9,620	11,800	3,254
Flexural strength (ASTM D790) (psi)	7,190	7,140	8,220	5,480	5,400	4,719
Coefficient of thermal expansion (ASTM D696)[(in)/(in x °F)] x 10 ⁻⁶	34	32	27	14	14	18
Dielectric constant (ASTM D150) (1 kHz)	46.0	41.0	38.0	46.0	45.0	43.0
Maximum continuous dry service temperature (°F)	300	300	450	200	200	180
Maximum continuous wet service temperature ('F)	140	140	150	150	N/A	150

NOTES: $^{\,2}$ Three-part system, beads separate

Chemical Resistance	Devcon® Wear Guard™ Fine Load	Devcon® Wear Guard™ High Load	Devcon® Wear Guard™ High Temp	Devcon® Tile Adhesive	Devcon® HV Tile Adhesive	Plexus® MMA Tile Adhesive
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	○00	○00	○••	○00	○00	○00
ALCOHOLS Methanol Isopropanol	0	⊗	⊗	0	0	0
KETONES Acetone Methyl ethyl ketone	0	0	0	\bigcirc	○	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	•	•	•		•	•
HYDROCARBONS Gasoline (unleaded) Mineral spirits	•	•	•	①	O	○
CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane	•	•	•	•	•	•
SALTS Sodium chloride Trisodium phosphate	O	0	•	0	0	0

Key: Excellent Very Good Fair Poor

Belting and Rubber Repair



THE NEWEST BELT REPAIR COMPOUND ...

Devcon® R-Flex®

Devcon® R-Flex® is a self-leveling urethane kit for repairing holes, tears, gouges, and now metal splice clips, in SBR heavy weight conveyor belts. With greater flexibility, Devcon® R-Flex® can now be used to coat directly over metal clips to extend the life of previous repairs made. The kit includes: resin, curing agent, surface conditioner, metal clip primer, mix bucket (4 lb size only), scrub pad, gloves, paper towels, and plastic spatula. The coverage for 15550 4 lb kit is 440 sq inches at 1/4" thickness and for 15565 1.5 lb kit is 110 sq. inches at 1/4" thickness. Devcon® Surface Conditioner is a 2-part system that enhances the adhesion of Devcon® R-Flex® to SBR rubber. The fluorescence in surface conditioner allows for visual inspection to ensure greatest adhesion to the belt. It's easy to see in dark locations or bright sun light where the surface conditioner has been applied.

Key Product Features:

- Self-leveling liquid while applying then becomes a non-sag gel in 4 minutes
- · Rapid initial adhesion
- Back in service in 90 minutes
- · Easy to mix and pour
- Available in two kit sizes for large and small repairs

Devcon® R-Flex®

The newest belt repair product in the market place. A self-leveling urethane kit for repairing holes and tears in conveyor belts. Also used to cover and protect clips/pins from scrapers.



- Functional cure in 90 minutes
- · High adhesion with surface pull of the SBR rubber
- · Kit includes surface conditioner

Item #	Items Per Case	Size	
15550	1	4 lb	
15565	4	1.5 lb	

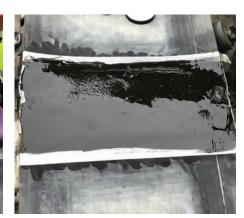








Before Repair: Large tear in belt due to rocks getting caught under the scraper blade.



After Metal Clips Splice Repair



After Repair: Belt flap cut down, Devcon Surface Conditioner and R-Flex applied to belt.

Belting and Rubber Repair

BELTING & RUBBER REPAIR

Flexible urethane technologies for repairing worn or damaged SBR conveyor belts, rubber lined equipment such as pipes and tanks in mines, quarries, and coal-fired power plants. These products are in a non-sag putty for patching and repairing linings along with self-leveling thixitropic versions that create a smooth surface for repairing conveyor belts.

Devcon® Flexane® 80 Putty

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

- Service temperatures to 180°F in dry environments and 120°F in wet environments
- Bonds to metal, concrete, rubber, wood, and fiberglass surfaces

Item #	Size	Items Per Case
15820	1 lb	6
15850	4 lb	1

Devcon® Flexane® Brushable

High-performance brushable urethane for protection against abrasion and impact.

- Excellent for repairing/coating rubber-lined pumps, tanks and valves
- Applies in thicknesses of 50 mils in one application



Item #	Size	Items Per Case	
15350	1 lh	6	

Devcon® Flexane® High Performance Putty

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

- Cures to a tough (tear strength 400 pli), resilient rubber compound (Hardness 78 Shore A)
- · Bonds to metal, rubber, wood, fiberglass, and concrete

Item #	Size	Items Per Case
15330	1 lb	6

Devcon® Flexane® Fast Cure Putty

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

- Light service duty in 3 hours
- Thixotropic, creamy formula which thickens in time
- Dispenser #15043 (manual) Nozzle #15047

Item #	Size	Items	Per Case
15049	400 ml Cartrid	ge	4

Devcon° Flexane° 80 Liquid

Medium-viscosity (10,000 cP) urethane fills voids completely and faithfully reproduces mold detail.

- Cures to semi-rigid rubber (Shore A 87)
- Cures at room temperature to a semi-rigid rubber material

Item #	Size	Items Per Case
15800	1 lb	6
15810	10 lb	1

Devcon® Flexane® FC Liquid

A convenient, time-saving method of filling expansion joints and repairing rubber.

- 8-minute working time
- No-mess dispensing with fast, easy, 400 ml reusable cartridges
- Dispenser #15043 (manual) Nozzle #15047

Item #	Size	Items Per Case
15050	400 ml Carti	ridge 4

Devcon® Flexane® 94 Liquid

Low-viscosity $(6,000\,\text{cP})$ urethane fills voids completely and faithfully reproduces mold detail.

- Similar to Flexane® 80 Liquid, but cures to (Shore A 97)
- Requires only a five hour demolding time

Item #	Size	Items Per Case
15250	1 lb	6
15260	10 lb	1

Devcon® Flex-Add™

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

- Creates a lower durometer castable urethane
- · Can match existing hardness of rubber

Item #	Size	Items Per Case
15940	8 oz	6

Devcon® Liquid Release Agent

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

- · Produces a high gloss finish
- Facilitates the accurate duplication of intricate details

Item #	Size	Items Per Case
19600	1 pt	6

Devcon® Flexane® Primer

Required for maximum adhesion of Flexane® products. FL-10 Primer for all metals. FL-20 Primer for rubber, wood, fiberglass and concrete. Ensures ultimate peel strength (greater than 80 psi).

Item #	Primer	Size	Items Per Case
15980	FL-10	4 oz	6
15985	FL-20	4 oz	6

Belting and Rubber Repair



Physical Properties	Devcon® R-Flex®	Devcon® Flexane® 80 Putty	Devcon® Flexane® Brushable	Devcon® Flexane® High Performance Putty	Devcon® Flexane® Fast Cure Putty	Devcon® Flexane® Fast Cure Liquid	Devcon® Flexane® 80 Liquid	Devcon® Flexane® 94 Liquid
Color	Black	Black	Black	Black	Black	Grey	Black	Black
Mix ratio by weight (resin:hardener)	88:12	72:28	80:20	94:6	80:20	80:20	77:23	69:31
Mixed viscosity (cP)	Putty	Putty	40,000	Putty	Putty	5,800	10,000	6,000
Pot life (minutes @ 75°F)	4	20	45	10	8	8	30	10
Specific volume (inches³/pound)	27.4	23.5	26.0	23.5	23.5	26.5	26.5	26.5
Coverage per pound (inches² @ 1/4" thickness)	440/110	94	104	94	94	106	106	106
Functional cure (hours)	1 1/2	12	18	16	3	2	16	16
Demolding time (hours)	N/A	N/A	N/A	N/A	N/A	N/A	10	5
Cured hardness (ASTM D2240) (Shore A)	92	87	86	78	88	94	87	97
Cured shrinkage (ASTM D2566) (inch/inch)	NA	0.0014	0.232	0.122	0.0014	0.0018	0.0018	0.0014
Tensile strength (ASTM D412) (psi)	1,462	1,700	3,500	4,500	2,400	3,300	2,100	2,800
Tear resistance (ASTM D624) (pli)	270	300	400	400	275	430	350	415
Abrasion resistance weight loss¹ (mg)	270	280	90	140	220	330	285	330
Maximum elongation (ASTM D412) (%)	421	300	600	600	500	450	650	500
Dielectric strength (ASTM D149) (volts/mil)	350	350	340	350	350	350	350	350
Maximum continuous wet service temperature (°F)	120	120	120	120	120	120	120	120
Maximum continuous dry service temperature (°F)	180	180	180	180	180	180	180	180
Maximum continuous wet service temperature (°F)	120	120	N/A	120	120	120	120	120

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

Chemical Resistance	Devcon® R-Flex®	Devcon® Flexane® 80 Putty	Devcon® Flexane® Brushable	Devcon® Flexane® High Performance Putty	Devcon® Flexane® Fast Cure Putty	Devcon® Flexane® Fast Cure Liquid	Devcon® Flexane® 80 Liquid	Devcon® Flexane® 94 Liquid
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% Sulfuric 50% Phosphoric 10%	00000	∅000	00000	0000				$\bigcirc \bigcirc $
ALCOHOLS Methanol Isopropanol	0	0	0	⊗	0	0	0	0
KETONES Acetone Methyl ethyl ketone	0	00	0	00	0	0	0	00
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0	0	0	0	0	0	0	0
HYDROCARBONS Gasoline (unleaded) Mineral spirits	0	0	0	0	00	0	0	00
SALTS Sodium chloride Trisodium phosphate Aluminum sulfate 10% Sodium carbonate 10%	0	0	0	0	0	0	0	0

Key: Excellent Very Good Fair Poor

Corrosion Resistant Epoxies

CORROSION REPAIR COMPOUNDS

Ceramic filled epoxy technology used to make permanent repairs to pumps, shafts, pipes, and tanks where a corrosion-resistant polymer is needed to protect all metals against corrosion and erosion in slurry applications. These products apply easily with a brush or trowel.

Devcon® Titanium Putty

High-performance, non-rusting titanium-reinforced epoxy putty for making repairs that can be precision machined.

- Withstands heavy loads in harsh chemical environments
- · High compressive strength

Item #	Size	Items Per Case
10760	1 lb	6
10770	2 lb	6



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.

- Temperature range up to 350°F
- Brushable Ceramic white is NSF 61 Certified

Item #	Size	Items Per Case
11760	2 lb (Red)	6
11762	12 lb (Red)	1
11765	2 lb (Blue)	6
11767	12 lb (Blue)	1
11770	2 lb (White)	6



Devcon® Ceramic Repair Putty

Trowelable, alumina-filled epoxy compound for rebuilding, smoothing and protecting processing equipment exposed to corrosion, erosion, cavitation, chemicals and acids.

- Temperature range up to 350°F
- Excellent for filling voids and rebuilding metal castings

Item #	Size	Items Per Case
11700	2 lh	6



Devcon® Ceramic Repair Compound

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

- Temperature range up to 350°F
- · Excellent for filling voids and rebuilding metal castings

Item #	Size	Items Per Case
11730	32 lh	1







Corrosion Resistant Epoxies



Physical Properties	Devcon [©] Titanium Putty	Devcon® Brushable Ceramic Red, Blue	Devcon® Brushable Ceramic White	Devcon® Ceramic Repair Putty	Devcon® Ceramic Repair Compound
Color	Grey	Red, Blue	White	Dark Blue	Dark Blue
Mix ratio by weight/volume (resin:hardener)	4.3:1 / 3:1	5.6:1 / 3.4:1	8:5:1 / 5:6:1	7:1 / 4.3:1	4.7:1 / 3.3:1
Mixed viscosity (cP)	Putty	32,000	40,000	Putty	Putty
Functional cure (hours)	16	16	16	16	16
Pot life (minutes @ 75°F)	21	40	21	25	45
Specific volume (inches³/pound)	11.7	17.5	16.5	16.4	17.9
Coverage per pound (inches² @ 1/4" thickness)	47	7.6 ¹	7.6 ¹	66	72
Cured hardness (ASTM D2240) (Shore D)	87	85	84	86	86
Cured shrinkage (ASTM D2566) (inch/inch)	0.0010	0.0020	0.0020	0.0022	0.0024
Adhesive tensile shear (ASTM D1002) (psi)	2,000	2,000	2,000	2,000	2,231
Compressive strength (ASTM D695) (psi)	15,200	13,700	13,200	12,700	10,240
Flexural strength (ASTM D790) (psi)	7,700	8,000	8,000	6,475	5,870
Modulus of elasticity (ASTM D638) (psi x 105)	9.5	8.0	8.0	8.1	8.1
Coefficient of thermal expansion (ASTM D696) [(in)/(in x 'F)] x 10 ⁻⁶	22	25.6	27.25	23.8	24.2
Thermal conductivity (ASTM C177) [(cal x cm)/(sec x cm2 x °C)] x 10°3	1.95	19	19	1.88	1.72
Dielectric constant (ASTM D150) (1 kHz)	44.8	1.92	1.92	4.1	3.8
Dielectric strength (ASTM D149) (volts/mil)	56	382	382	370	350
Maximum continuous dry service temperature (°F)	350	350	350	350	350
Maximum continuous wet service temperature (˚F)	150	150	150	150	150

NOTES: 1 Coverage (feet2 @ 15 mils)

Chemical Resistance	Devcon® Titanium Putty	Devcon [®] Brushable Ceramic Red, Blue	Devcon [©] Brushable Ceramic White	Devcon® Ceramic Repair Putty	Devcon® Ceramic Repair Compound
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%			○●●		
ALCOHOLS Methanol Isopropanol	•	•	•	•	•
KETONES Acetone Methyl ethyl ketone	0	0	0	0	⊗
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	•	•	•	•	
HYDROCARBONS Gasoline (unleaded) Mineral spirits	•	•	•	•	•
CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane	•	•	•	•	•
SALTS Sodium chloride Trisodium phosphate	•	•	•	•	•









METAL REPAIR EPOXIES

Metal-filled epoxy technology that allow for fast economical permanent repairs to power plant and mining equipment. They can be machined, tapped and drilled, and corrosion resistant to harsh chemicals. These products are available in pourable versions that can be used to provide accurate detail reproductions for short run prototype mold patterns, holding fixtures and forming dies.



Devcon' Plastic Steel' Putty (A)

The original metal-filled epoxy putty, it is ideal for repairing areas where welding or brazing would be impractical.

- Can be drilled, tapped and machined.
- Conforms to the requirements of MIL-PRF-24176C, Type I

Item #	Size	Items Per Case
10110	1 lb	6
10120	4 lb	6
10130	25 lb	1



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

	Δ	R
TYPE AP	PROVED	PROI

Item #	Size	Items Per Case
10210	1 lb	6
10220	4 lb	6
10230	25 lb	1

Devcon' Plastic Steel' 5 Minute' Putty (SF)

Fast-curing, steel-filled epoxy for emergency repairs at temperatures as low as $40\,^{\circ}\text{F}.$

- Repaired parts can be returned to service within one hour
- Mixes, applies, and cures at temperatures as low as 40°F

Item #	Size	Items Per Case
10240	1 lb	6



Devcon' Stainless Steel Putty (ST)

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

- · Bonds to ferrous and non-ferrous metals
- NSF 61 Certified

Item #	Size	Items Per Case
10270	1 lb	6





Devcon* Aluminum Putty

Aluminum-filled epoxy putty for dependable nonrusting repairs to aluminum castings, machinery and equipment.

- Can be machined drilled or tapped using conventional metalworking tools
- Widely used in HVAC applications, it conforms to requirements of MIL-PRF-24176C, Type II

Item #	Size	Items Per Case
10610	1 lb	6
10620	3 lb	6



Devcon* Aluminum Liquid (F-2)

Aluminum-filled pourable epoxy for making molds, patterns and holding fixtures.

- It can be drilled, tapped and machined
- Hardens in just over 1 hour; cures in 16 hours
- Qualifies under Federal Specification MMM-A-1754, Adhesive/ Sealing

Item #	Size	Items Per Case
10710	1 lb	6
10720	3 lb	6



Devcon[®] Underwater Repair Putty (UW)

High-performance technology for repairing, patching, and rebuilding equipment in habitually wet environments, including under water.

- Non-rusting; easy-to-mix and apply
- Eliminates the need for substrate to be thoroughly dry before repair

Iltem #	Size	Items Per Case
11800	1 lh	6



Metal Repair



Physical Properties	Devcon® Plastic Steel® Putty (A)	Devcon® Plastic Steel® Liquid (B)	Devcon® Plastic Steel® 5 Minute® Putty (SF)	Devcon° Stainless Steel Putty (ST)	Devcon₀ Aluminum Putty (F)	Devcon® Aluminum Liquid (F-2)	Devcon° Underwater Repair Putty (UW)
Color	Dark Grey	Dark Grey	Dark Grey	Grey	Aluminum	Aluminum	Grey
Mix ratio by weight/volume (resin:hardener)	9:1 / 2.5:1	9:1 / 3:1	1.7:1 / 1:1	11:1 / 3.75:1	9:1 / 4:1	9:1 / 5:1	1.4:1 / 1:1
Mixed viscosity (cP)	Putty	15 / 25,000	Putty	Putty	Putty	15 / 25,000	Putty
Functional cure (hours)	16	16	1	16	16	16	24
Pot life (minutes @ 75°F)	45	45	5	58	60	75	45
Specific volume (inches³/pound)	11.9	13.1	12.2	12.4	17.5	17.5	17.0
Coverage per pound (inches² @ 1/4" thickness)	48	52	49	50	70	70	68
Cured hardness (ASTM D2240) (Shore D)	85	85	85	85	85	85	82
Cured shrinkage (ASTM D2566) (inch/inch)	0.0006	0.0006	0.0006	0.0010	0.0008	0.0009	0.0020
Adhesive tensile shear (ASTM D1002) (psi)	2,800	2,800	2,026	2,385	2,600	2,700	2,685
Compressive strength (ASTM D695) (psi)	8,260	10,200	10,400	8,400	8,420	9,820	5,625
Flexural strength (ASTM D790) (psi)	5,600	7,480	7,680	5,280	6,760	7,180	4,990
Modulus of elasticity (ASTM D638) (psi x 10 ⁵)	8.5	8.5	7.5	8.0	8.0	7.5	7.5
Coefficient of thermal expansion (ASTM D696) [(in)/(in x °F)] x 10 ⁻⁶	48	38	34	34	29	50	18
Thermal conductivity (ASTM C177) [(cal x cm)/(sec x cm² x °C)] x 10 °3	1.37	1.39	2.65	1.23	1.73	1.58	1.41
Dielectric constant (ASTM D150) (1 kHz)	67.5	67.5	35.0	75.0	21.4	8.6	8.6
Dielectric strength (ASTM D149) (volts/mil)	30	30	30	30	100	100	150
Maximum continuous dry service temperature (°F)	250	250	200	250	250	250	250
Maximum continuous wet service temperature (°F)	120	120	N/A	120	120	120	120

Chemical Resistance	Devcon® Plastic Steel® Putty (A)	Devcon® Plastic Steel® Liquid (B)	Devcon® Plastic Steel® 5 Minute® Putty (SF)	Devcon∘ Stainless Steel Putty (ST)	Devcon° Aluminum Putty (F)	Devcon® Aluminum Liquid (F-2)	Devcon [®] Underwater Repair Putty (UW)
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	○●●	○00	000	○00	\bigcirc \bigcirc \bigcirc	\bigcirc \bigcirc \bigcirc	000
ALCOHOLS Methanol Isopropanol	⊗	0	⊘	0	0	⊗	0
KETONES Acetone Methyl ethyl ketone	0	0	⊘	00	⊘	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	O	0	0
CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane	•	•	0	•	•	•	•
SALTS Sodium chloride Trisodium phosphate	0	0	0	•	O	O	0

Key: Excellent Very Good Fair Poor



METAL REPAIR EPOXIES

Metal-filled epoxy technology that allow for fast economical permanent repairs to power plant and mining equipment. They can be machined, tapped and drilled, and corrosion resistant to harsh chemicals. These products are available in pourable versions that can be used to provide accurate detail reproductions for short run prototype mold patterns, holding fixtures and forming dies.

Devcon® Bronze Putty

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

- Repairs and rebuilds areas where brazing would be undesirable or impossible
- Bonds securely to bronze alloys, brass, copper, and ferrous metals

Item #	Size	Items Per Case
10260	1 lb	6



Devcon® Wear Resistant Putty (WR-2)

Smooth, non-rusting, all-purpose epoxy putty for repairs requiring low-friction finishes, such as machine lathe beds.

- Bonds to steel, iron, aluminum, ceramic, concrete, brass, and some plastics
- · Contains wear-resistant fillers for low friction applications

Item #	Size	Items Per Case
11410	1 lb	6
11420	3 lb	6

Devcon® FasMetal™

High-performance, alumina-filled epoxy for making fast, dependable emergency repairs to leaks in pipes.

- Hardens in 5 minutes
- Economical and convenient

Item #	Size	Items Per Case
10780	.75 lb	6



Devcon® HVAC Repair (Special F)

Aluminum-filled epoxy adhesive for HVAC repairs.

- · Repairs coils in compressors
- · Hardens to a rigid bond that can be ground, drilled or tapped

Item #	Size	Items Per Case
19770	6507	12

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 #	Size	Items Per Case
11500	4" x 9" Patch	6



Devcon® Liquid Release Agent

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

- Produces a high gloss finish
- · Facilitates the accurate duplication of intricate details

Item #	Size	Items Per Case
19600	1 pt	6

Devcon® Cleaner Blend 300

Safe, multi-purpose, non-trichloroethane based degreaser for removing heavy grease and oil from metal surfaces.

- Needs no rinsing; leaves no residue
- · Evaporates fast

Item #	Size	Items Per Case
19510	1 pt	6

Metal Repair



Physical Properties	Devcon ^o Bronze Putty (BR)	Devcon® Wear Resistant Putty (WR-2)	Devcon [©] FasMetal™	Devcon® HVAC Repair (Special F)	Devcon [©] Zip Patch™
Color	Bronze	Dark Grey	Grey	Grey	Brown
Mix ratio by weight / volume (resin:hardener)	9:1 / 3:1	9:1 / 4:1	1.07:1 / 1:1	0.9:1 / 1:1	N/A
Mixed viscosity (cP)	Putty	Putty	Putty	40,000	17,000
Functional cure (hours)	16	16	1	16	1
Pot life (minutes @ 75°F)	35	45	4	60	5
Specific volume (inches³/pound)	12.4	13.9	17.2	16.1	N/A
Coverage per pound (inches² @ 1/4" thickness)	50	56	69	64	N/A
Cured hardness (ASTM D2240) (Shore D)	85	85	90	85	70
Cured shrinkage (ASTM D2566) (inch/inch)	0.0010	0.0005	0.0093	0.0008	0.0010
Adhesive tensile shear (ASTM D1002) (psi)	2,680	2,200	2,000	2,500	2,400
Compressive strength (ASTM D695) (psi)	8,540	9,800	12,700	8,420	N / A
Flexural strength (ASTM D790) (psi)	6,180	6,500	7,700	6,260	19,000
Modulus of elasticity (ASTM D638) (psi x 10 ⁵)	8.0	7.5	8.5	7.8	2.9
Coefficient of thermal expansion (ASTM D696) [(in)/(in x °F)] x 10 °s	33	32	32	29	64
Thermal conductivity (ASTM C177) [(cal x cm)/ (sec x cm² x °C)] x 10 ⁻³	1.57	1.67	2.04	1.73	1.71
Dielectric constant (ASTM D150) (1 kHz)	75.0	6.3	18.6	21.4	43.5
Dielectric strength (ASTM D149) (volts/mil)	25	400	370	100	250
Maximum continuous dry service temperature (°F)	250	250	250	250	200
Maximum continuous wet service temperature (°F)	120	120	120	110	N/A

Chemical Resistance	Devcon [®] Bronze Putty (BR)	Devcon [®] Wear Resistant Putty (WR-2)	Devcon® FasMetal™	Devcon® HVAC Repair (Special F)	Devcon⊚ Zip Patch™
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	○00	○ 0 0		∅00	○00
ALCOHOLS Methanol Isopropanol	0	0	⊗	0	\Q
KETONES Acetone Methyl ethyl ketone	⊗	0 0	O	0	0
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	•	0	•	O	⊗
HYDROCARBONS Gasoline (unleaded) Mineral spirits	•	0	0	•	● ⊗
CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane	•	•	0	0	0
SALTS Sodium chloride Trisodium phosphate	•	0	0	•	0

Key: Excellent Very Good Fair Poor



Floor Repair and Surfacing

FLOOR REPAIR/PATCHING COMPOUNDS

100% solids epoxy-based polymers 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 8,000 psi, Floor Patch™, provides three times the typical strength of concrete.

Item #	Size	Items Per Case
13100	10 lb	1
13120	40 lb	1

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 #	Size	Items Per Case	
13110	10 lb	1	

Devcon® Floor Patch™ Resurfacer

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

Item #	Size	Items Per Case
13130	41 lb	1

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 #	Size	Items Per Case	
13800	50 lb	1	

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 #	Size	Items Per Case	
13550	35 lh	1	

ANTI-SKID PROTECTION

Granular additives used with ${\sf Devcon}^{\circledcirc}$ floor coatings to produce anti-slip surfaces for worker safety.

Devcon® Floor Grip™

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

Item #	Size	Items Per Case
13090	2 gal	1

FLOOR COATINGS

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

Devcon® Epoxy Coat™ 7000 Non-VOC

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

Item #	Size	Items Per Case	
12710	2 gal	1	



Devcon[®] Epoxy Coat[™] 7000 AR (Acid Resistant)

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

Item #	Size	Items Per Case	
12750	2 gal	1	

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 #	Size	Items Per Case
12560	2 gal	1





Floor Repair and Surfacing







Physical Properties	Floor Patch™	Floor Patch™ FC	Ultra Quartz™	Floor Patch [™] Resurfacer	Deep Pour Grout™	Epoxy Concrete Sealer	Epoxy Coat" 7000 Non VOC	Epoxy Coat™ 7000 AR
Coverage per unit (feet² @ thickness)	18 @ 0.25" / 40 lb unit	4.5@ 0.25" / 10 lb unit	13 @ 0.25" / 35 lb unit	568 inches ³ / 41 lb unit	640 inches ³ / 50 lb unit	400 @ 8 mils	400 @ 8 mils	200 @ 16 mils
Mixed viscosity (cP)	Putty	Putty	Putty	5,000	13,000	2,000	2,000	3,600
Minimum application temperature (°F)	60 ~ 90	60 ~ 90	60 ~ 90	50 ~ 90	50 ~ 90	40 ~ 90	55 ~ 90	60 ~ 90
Pot life (minutes @ 75°F)	45	15	60	40	40	60	55	36
Functional cure (hours)	16	3	16	24	16	24	24	24
Cured hardness (ASTM D2240) (Shore D)	85	85	95	85	83	85	85	85
Maximum continuous service temperature (°F)	250	250	250	180	180	180	180	200
% Solids	100	100	100	100	100	100	100	100

Chemical Resistance	Floor Patch™	Floor Patch™ FC	Ultra Quartz™	Floor Patch [™] Resurfacer	Deep Pour Grout™	Epoxy Concrete Sealer	Epoxy Coat [™] 7000 Non VOC	Epoxy Coat™ 7000 AR
ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10%	○00	○00	○●	000	○00	○00	○00	○●
ALCOHOLS Methanol Isopropanol	0	0	•	0	0	⊘	0	0
KETONES Acetone Methyl ethyl ketone	00	00	00	00	00	0	00	00
ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10%	0	0	•	•	0	•	•	•
HYDROCARBONS Gasoline (unleaded) Mineral spirits	0	0	•	\bigcirc	0	O	0	•
CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane	•	•	•	•	•	•	•	•
SALTS Sodium chloride Trisodium phosphate	•	•	•	0	0	0	0	•

Key: Excellent Very Good Fair Poor







Threadlockers/Thread Sealants

THREADLOCKERS

Permatex® Medium Strength Threadlocker BLUE

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



Item #	Size
24210	10 ml Bottle, Carded
24250	50 ml Bottle
24225	250 ml Bottle

Permatex® Surface Insensitive Threadlocker BLUE

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

Item #	Size	_
24350	50 ml Bottle	
24325	250 ml Bottle	

Permatex® Permanent Strength Threadlocker RED

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

Item #	Size
26210	10 ml Bottle, Carded
26250	50 ml Bottle
26225	250 ml Bottle



Permatex® High Strength Threadlocker RED

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

Item #	Size
27110	10 ml Bottle, Carded
27150	50 ml Bottle
27125	250 ml Bottle



Permatex® High Temperature Threadlocker RED

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

Item #	Size	
27250	50 ml Bottle	

Permuter: In section in the section

Permatex® Large Diameter Threadlocker RED

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

Item #	Size
27725	250 ml Bottle

Permatex® Penetrating Grade Threadlocker GREEN

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

Item #	Size
29050	50 ml Bottle

Permatex[®] GEL TWIST™

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

Permatex® Medium Strength Threadlocker BLUE Gel

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

Item #	Size	
24010	10 g GEL TWIST™ Applicator, Carded	
	8 · · · · · · · · · · · · · · · ·	RI

Permatex® High Strength Threadlocker RED Gel

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

Item #	Size
27010	10 g GEL TWIST™ Applicator, Carded

Threadlockers/Thread Sealants



THREAD SEALANTS

Permatex® Thread Sealants seal and secure metal pipes and fittings. By filling the space between threaded metal parts, Thread Sealants prevent leakage caused by vibration loosening, tape shredding, solvent evaporation, damaged threads and temperature cycling. Designed for low- and high-pressure applications, Thread Sealants seal instantly for online low-pressure testing.







Permatex® High Performance Thread Sealant

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

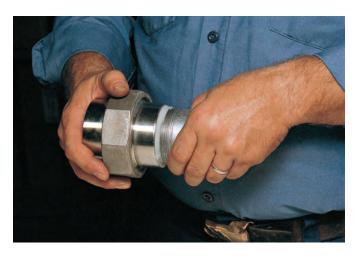
Item #	Size	
56521	50 ml Tube, Carded	
56525	250 ml Tuhe	



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. Parts may be repositioned up to 4 hours after application. Contains PTFE. Temperature range from -65°F to 400°F (-54°C to 204°C).

Item #	Size	
59235	50 ml Tube, Carded	
59225	250 ml Tube	



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 #	Size	
56750	50 ml Tube, Carded	
56725	250 ml Tuhe	

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 #	Size	Part #
80632	4 oz Can	14H
80633	16 oz Can	14D

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 #	Size	
54550	50 ml Bottle	

PIPE JOINT COMPOUND

Permatex* **Pipe Joint Compound**

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

Item #	Size	Part #
80045	16 oz Bottle	51D





Gasketing/Retaining Compounds

GASKET MAKERS

Permatex® the Right Stuff® Gasket Maker

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

Item #	Size
25224	7 oz Automatic Tube*
85224	7.5 oz PowerBeadTM Can
33694	10.1 fl oz Cartridge



Permatex® Ultra Black® Gasket Maker

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

Item #	Size
82180	3.35 oz Tube, Carded
82080	8.75 oz Automatic Tube*
85080	9.5 oz PowerBeadTM Can
24105	13 oz Cartridge



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, non-corrosive. Outstanding oil and coolant resistance. Temperature range -65°F to 450°F (-54°C to 232°C) continuous, 500°F (250°C) intermittent. Resists common fluids and excessive vibration.

Item #	Size	
82194	3.5 oz Tube, Carded	
82195	13 oz Cartridge	

Permatex[®] Ultra Blue[®] RTV Silicone Gasket Maker

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

Item #	Size	Part #
81724	3.35 oz Tube, Carded	77BR
85519	9.5 oz PowerBead™ Can	
81725	13 oz Cartridge	77C



Permatex* Sensor-Safe Blue RTV Silicone Gasket Maker

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

Item #	Size	Part #	
80022	3 oz Tube, Carded	6BR	
81860	7.25 oz Automatic Tube*	6MA	
80628	12.9 oz Cartridge	6C	

NSF.

Permatex* High-Temp Red RTV Silicone Gasket Maker

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

Item #	Size	Part #
81160	3 oz Tube, Carded	26BR
81915	7.25 oz Automatic Tube°	
85915	7.25 oz PowerBead™ Can	
81409	11 oz Cartridge	26C





Permatex[®] Ultra Copper[®] RTV Silicone Gasket Maker

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

Item #	Size	Part #	
81878	3 oz Tube, Carded	101BR	
82751	300 ml Cartridge	101C	

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 #	Size
51813	50 ml Tube, Carded
51845	300 ml Cartridge

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 #	Size
51531	50 ml Tube
51580	300 ml Cartridge

Gasketing/Retaining Compounds





RETAINING COMPOUNDS

Permatex® Bearing Mount for Close Fits

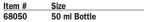
A low viscosity, rapid-curing anaerobic adhesive that augments the strength of press fit assemblies. Prevents fretting and corrosion. Up to 3,000 psi holding power. Mil-Spec (R-46082B), Type I.

<u>Item # Size</u> 60950 50 ml Bottle



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.





ANTI-SEIZE & 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 #	Size	Part #
80003	11 oz Tube, Boxed	1C

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

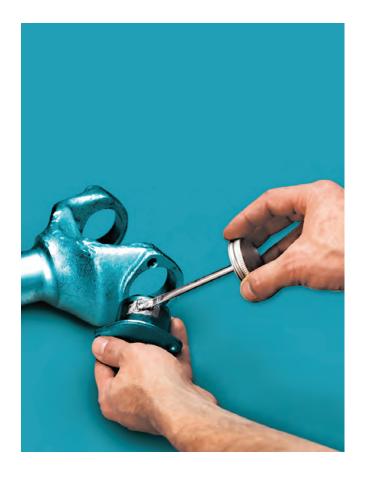
Reliable paste-like gasket sealant/dressing/coating. Form-A-Gasket® No. 2 sets more slowly to a pliable film best suited for non-rigid, vibrating assemblies. Use to 400°F (204°C). Resistant to gasoline and other solvents. Conforms to MIL-S-45180 D, Type II.

Item #	Size	Part #	
80015	1.5 oz tube, Carded	2AR	
80016	3 oz tube, Carded	2BR	
80011	11 oz tuhe Boxed	2C	

Permatex[®] Aviation Form-A-Gasket[®] No. 3 Sealant

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

Item #	Size	Part #	
80017	16 fl oz Bottle	3D	







SILICONE SEALANTS

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.

Item #	Size	
80050	3 oz Tube, Carded	
81913	7.25 oz Automatic Tube*	
85913	7.25 oz PowerBead™ Can	
80855	11 oz Cartridge	

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 #	Size	Part #
81173	12.9 oz Cartridge	16C



ANTI-SEIZE LUBRICANTS

Permatex® Anti-Seize Lubricant

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

Item #	Size	Part #
80071	4 oz Brush-Top Bottle	
80078	8 oz Brush-Top Bottle	133K
80208	16 oz Brush-Top Bottle	767

Permatex® Copper Anti-Seize Lubricant

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

Item #	Size	
09128	Brush-Top Bottle	
31163	Brush-Top Bottle	



Permatex® Nickel Anti-Seize Lubricant

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

Item #	Size	Part #	
77124	Brush-Top Bottle	771	
77164	Brush-Top Bottle	771	

HAND CLEANERS

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

Permatex* Fast Orange* Pumice and Smooth Lotion Hand Cleaners

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

Pumice Lotion

Item #	Size
25219	1 gallon bottle w/pump

Smooth Lotion

Item #	Size
23218	1 gallon bottle w/pump



AGENCY APPROVALS AND REFERENCES

Devcon® Mil-Spec, UL and Other Government Specifications

Product Category	Specification	Product	Part #	Size
Devcon* Silicone Adhesive Sealants	A-46106A	Silite* Silicone RTV-Clear	17100	3 oz Cartridge
			17150	10.3 oz Cartridge
		Silite® Silicone RTV-White	17140	10.3 oz Cartridge
		Silite® Silicone RTV (High Temp.)	17130	10.3 oz Cartridge

Product Category	Specification	Product	Part #	Size
			10110	1 lb
		Plastic Steel* Putty (A)	10120	4 lb
	MIL-PRF-24176C,		10130	25 lb
	Type I	Titonium Buttu	10760	1 lb
		Titanium Putty	10770	2 lb
Devcon*		Ceramic Repair Putty	11700	3 lb
Metal Repair	MIL-PRF-24176C,	Alliminim Plitty (F)	10610	1 lb
Compounds	Type II		10620	3 lb
	MMM-A-1754	Plastic Steel® Liquid (B)	10210	1 lb
			10220	4 lb
			10230	25 lb
		Aluminum Liquid (F-2)	10710	1 lb
			10720	3 lb

Devcon® ABS Type Approved Products

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

Shore Hardness

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

Devcon® NSF Registered Products

Product Category	NSF Approval	Product	Part #	Size
		Silite* Silicone RTV-Clear	3 oz Tube	
Devcon*	NSF/	Silite Silicone RTV-Clear	17150	10.3 oz Tube
Silicone Adhesive Sealants	ANSI 51	Silite [®] Silicone RTV-White	17140	10.3 oz Tube
		Silite [®] Silicone RTV (High Temp.)	17130	10.3 oz Tube
Devcon [®] Metal Repair	NSF/	Stainless Steel Putty	10270	1 lb
Compounds	ANSI 61	Brushable Ceramic (White)	2 lb	
		Floor Patch™	13100	10 lb.
Devcon*		Floor Fatch	13120	40 lb
Flooring Repair	R2	Floor Patch™ FC 13110		10 lb
		Epoxy Coat™ 7000 Non VOC	12710	2 gal

Viscosity (cP)

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

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

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

Bead Length² (inches)

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

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



Permatex[®] Mil-Spec, UL and Other Government Specifications

Product Category	Specification	Product	Part #	Size
		ODE O Wileland	70144	14 g bottle
	A-A-3097,	GPE 3 Wicking	70145	2 g tube
	Type II, Class 1	GPE 15 Rubber Bonder	70213	1/3 oz bottle
Permatex* ZIP GRIP*		GPE 30 All Purpose	70350	1 oz bottle
Instant Adhesives	A-A-3097, Type II, Class 2	GPE 100 All Purpose- Medium Viscosity	70450	1 oz bottle
		TE 1000 Gap Filling	72161	1 lb bottle
	A-A-3097, Type II, Class 3	TE 2400 Gap Filling-	72250	1 oz bottle
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Hi Temp	72261	1 lb bottle
			24210	10 ml bottle
	S-46163A, Type II, Grade N	Medium Strength Threadlocker BLUE	24250	50 ml bottle
	1,50 11, 41440 11		24225	250 ml bottle
			26210	10 ml bottle
	S-46163A, Type II, Grade 0	Permanent Strength Threadlocker RED	26250	50 ml bottle
Permatex*	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		26225	250 ml bottle
Threadlockers Liquids			27110	10 ml bottle
ычина	S-46163A, Type I, Grade K	High Strength Threadlocker RED	27150	50 ml bottle
	Typo I, urado II	THIOUGIOUNOI NED	27125	250 ml bottle
	S-46163A, Type I, Grade L	Large Diameter Threadlocker RED	27725	250 ml bottle
	S-46163A,	Penetrating Grade	29050	50 ml bottle
	Type III, Grade R	Threadlocker GREEN	29025	250 ml bottle
Permatex* Retaining Compounds	R-46082B, Type I	Bearing Mount for Close Fits	60950	50 ml bottle
			80050	3 oz tube
		Clear RTV Silicone Adhesive	81913	7.25 oz Automatic Tube°
		Sealant	85913	7.25 oz PowerBead [™] can
			80855	11 oz cartridge
Permatex* Silicone	A-46106B,		81160	3 oz tube
Adhesive Sealants	Type I	High Temp Red RTV	81915	7.25 oz Automatic Tube*
		Silicone Gasket	85915	7.25 oz PowerBead™ can
			81409	11 oz cartridge
		Black Silicone Adhesive	81158	3 oz tube
		Sealant	81173	12.9 oz cartridge

Permatex® NSF Registered Products

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Product Category	NSF [®] Approval	Product	Part #	Size			
			24210	10 ml Bottle			
		Medium Strength Threadlocker BLUE	24250	50 ml Bottle			
		24225 2	250 ml Bottle				
Permatex* Liquid Threadlockers	P1		26210	10 ml Bottle			
		Permanent Strength Threadlocker RED	26250	50 ml Bottle			
			26225	250 ml Bottle			
		Penetrating Grade Threadlocker GREEN	29050	50 ml Bottle			
Permatex*	P1	Medium Strength Threadlocker BLUE	24010	10 g Gel Twist™ Carded			
Gel Threadlockers	F1	High Strength Threadlocker RED	27010	10 g Gel Twist™ Carded			
Permatex*	D4	High Performance	56521	50 ml tube, Carded			
Thread Sealants	P1	Thread Sealant	56525	250 ml Tube			
Permatex® Retaining Compounds	P1	Bearing Mount for Relaxed Fits	68050	50 ml Bottle			
•		ULTRA BLUE* RTV Silicone Gasket Maker	81724	3.35 oz tube, Carded			
			85519	9.5 oz PowerBead™ Can			
			81725 13 oz Car				
			25224	7 oz Automatic Tube			
Permatex [®] Gasket Makers	P1	The Right Stuff	29208	5 oz Cartridge			
		Gasket Maker	85224	9.5 oz PowerBead™ Can			
			33694	10.1 fl oz Cartridge			
		Anaerobic	51813	50 ml tube, Carded			
		Gasket Maker	51845	300 ml Cartridge			

















SDS/TDS: Access SDSs and TDSs from our website: www.itwadhesives.com. Select the product brand to search.

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