

Wear & Abrasion Solutions

Mining & Coal Preparation | Cement Processing | Coal-Fired Power Plants | Pulp & Paper | Steel Processing





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Product Technologies

Wearing Compounds

Specially formulated wear-resistant epoxy coatings that protect dry materials handling and storage equipment from sliding abrasion, impact and wear. These products are trowelable, non-sag putties available in large particulate, high impact, and high temperature formulas. Tile Adhesives are high strength, room temperature curing, trowelable adhesives that bond ceramic tiles to metal.

Belting and Rubber Repair Compounds

Flexible urethane structural 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 thixotropic versions that create a smooth surface for repairing conveyor belts.

Corrosion Repair Compounds

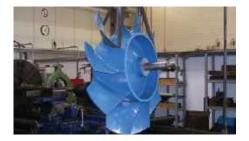
Ceramic filled epoxy technology to make permanent repairs to pumps, shafts, pipes, and tanks where a corrosion-resistant polymer is needed to protect all metals against corrosion and erosion in slurry applications. These products apply easily with spray, a brush or in a creamy putty consistency that allows you to be back in service within 3-5 hours.

Metal Repair Epoxies

Metal-filled epoxy technology that allows for fast, economical, permanent repairs to power plant and mining equipment. The epoxies cure quickly; can be machined, tapped and corrosion resistant to harsh chemicals. These products are available in liquid formulas that can be used for mold patterns, holding fixtures and forming dies.









Wear-resistant, Abrasion-resistant Coatings

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™

An easy-to-mix 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 strength than ceramic tile

| Item # | Size: |
|--------|-------|
| 11330 | 30 lb |

Devcon[®] DFense Blok™ Surface Wetting Agent

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

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

 Item #
 Size:

 11340
 1 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 #
 Size:

 11350
 9 lb

Devcon[®] DFense Blok™ Power Mixer

Recommended for most effective way to thoroughly mix DFense Blok™ Wearing Compound. Can be used with any of our 5 gallon pail wearing compounds.

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

 Item #
 Size:

 11301
 5 Gallon

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

ltem # Size: 11320 1 lb



Watch our Impact Test!



Technical Information

| Physical Properties | Devcon [®] DFense Blok™ | Devcon [®] DFense Blok™ Surface Wetting Agent | Devcon® DFense Blok™ Fast Cure (FC) | Devcon [®] DFense Blok™ Quick Patch |
|---------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------|----------------------------------------|-------------------------------------------------|
| Color | Grey | Orange | Grey | Grey |
| Mix ratio by weight / volume resin:hardener | 2:1 / 100:45 | 2:1/100:44 | 2:1/2:1 | 1:1/1:1 |
| Mixed viscosity cP | Putty | Thixotropic Gel | Putty | Putty |
| Functional cure hours | 4-5 | 4-5 | 2-3 | 30 minutes |
| Pot life minutes @ 75°F | 25 | 12-15 | 15 | 4 |
| Specific volume inches ³ /pound | 12.6 | 24.7 | 13.5 | 14.89 |
| Coverage per pound inches ² @ 1/4" thickness | 47 | 1860 @ 12mils | 53 | 60 |
| Cured hardness (ASTM D2240) Shore D | 77 | 71 | 80 | 84 |
| Cured shrinkage (ASTM D2566) inch/inch | 0.0005 | N/A | 0.0008 | 0.0010 |
| Adhesive tensile shear (ASTM D1002) psi | 2,616 | 2,616 | 2,764 | 2,495 |
| Compressive strength (ASTM D695) psi | 7,145 | 5,032 | 7,178 | 6,166 |
| Flexural strength (ASTM D790) psi | 7,876 | 6,700 | 7,488 | 4,880 |
| Coefficient of thermal expansion (ASTM D696)[(in)/(in x 'F)] x 10 ⁻⁶ | 29 | N/A | 33 | 31 |
| Dielectric constant (ASTM D150) | 49.0 | N/A | 45 | 51 |
| Maximum continuous dry service temperature °F | 300 | 300 | 300 | 200 |
| Maximum continuous wet service temperature °F | 140 | N/A | 140 | N/A |

| Chemical Resistance | Devcon [®] DFense Blok™ | Devc Surf |
|------------------------------------------------------------------|----------------------------------|--------------|
| ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% | | |
| ALCOHOLS Methanol Isopropanol | © O | |
| KETONES Acetone Methyl ethyl ketone | O Ø | |
| ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10% | | |
| HYDROCARBONS Gasoline (unleaded) Mineral spirits | 0 | |
| CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane | | |
| SALTS Sodium chloride Trisodium phosphate | | |
| Key: Excellent Very Good |) Fair 🚫 Poor | |

| ո [®] DFense Blok™ e Wetting Agent | Devcon [®] DFense Blok™ Fast Cure (FC) | Devcon [®] DFense Blok™ Quick Patch |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------|
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Wear-resistant, Abrasion-resistant Coatings

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 γ_8 ".

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

 Item #
 Size:

 11470
 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 #
 Size:

 11490
 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 #
 Size:

 11495
 20 lb

Devcon[®] Wear Guard™ Ultra

Alumina ceramic bead-filled epoxy system with outstanding abrasion resistance for severe service conditions.

- Outstanding Wear ResistanceExtends Equipment Operating
- Cycles

 Item #
 Size:

 11475
 30 lb

Devcon[®] Wear Guard[™] High Impact

High density micro alumina ceramic beadfilled epoxy system with a flexible additive for superior impact and abrasion resistance.

- Non sagging putty in a creamy consistency
- High compression and impact strength

ltem # Size: 11460 30 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

| ltem # | Size: |
|--------|-------|
| 11489 | 20 lb |

.





Devcon[®] Combo Wear FC

and concrete surfaces

Size:

Devcon[®] Wear Guard[™] High

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

Size:

30 lb

9 lb

Item #

11450

Temp

•

ltem #

11480

High-tech, three-component (2 bead sizes

plus silicon carbide) compound for repairing

Excellent adhesion to metal, ceramic

Ideal for cracks in large coal fuel lines

process equipment quickly and returning it to service in as little as 1-1/2 hours.

| Physical Properties | Devcon [®] Wear Guard™ Fine Load | Devcon [®] Wear Guard™ High Load | Devcon [®] Wear Guard™ High Temp | Devcon [®] Wear Guard™ High Impact | Devcon [®] Wear Guard™ Ultra | Devcon® Combo Wear FC (Fast Cure) | Devcon [®] Tile Adhesive | Devcon [®] HV Tile Adhesive |
|----------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|---------------------------------------------------|---------------------------------------------|-----------------------------------------|-----------------------------------------|--------------------------------------------|
| Color | Grey | Grey | Grey | Dark Grey | Grey | Grey | White | Grey |
| Mix ratio by weight /volume resin:hardener | 2:1/2:1 | 2:1/2:1 | 13.7:1 / 6:1 | 2.5:1 / 2.5:1 | 2.15:1:5.65 ² | 2:1/2:1 | 1.1:1 / 1:1 | 1.1:1 / 1:1 |
| Mixed viscosity cP | Putty | Putty | Putty | Putty | Putty | Putty | Putty | Putty |
| Functional cure hours | 6-8 | 6-8 | Heat Cured | 6-8 | 16 | 2-3 | 12 | 8 |
| Pot life minutes @ 75°F | 30 | 30 | 120 | 30 | 20 | 7 | 240 | 35 |
| Specific volume inches ¹ /pound | 12.4 | 12.9 | 14.3 | 12.4 | 11.4 | 12.4 | 19.2 | 19 |
| Coverage per pound inches ² @ 1/4" thickness | 50 | 50 | 60 | 50 | 46 | 50 | 76.8 | 76 |
| Cured hardness (ASTM D2240) Shore D | 87 | 87 | 87 | 85 | 87 | 87 | 81 | 81 |
| Cured shrinkage (ASTM D2566) inch/inch | 0.0006 | 0.0006 | 0.0010 | 0.0006 | 0.0004 | 0.0008 | 0.0010 | 0.0010 |
| Adhesive tensile shear (ASTM D1002) psi | 1,375 | 1,474 | 2,300 | 2,567 | 1,425 | 1,450 | 2,890 | 1,825 |
| Compressive strength (ASTM D695) psi | 11,000 | 11,000 | 13,200 | 7,250 | 13,910 | 11,000 | 9,620 | 11,800 |
| Flexural strength (ASTM D790) psi | 7,190 | 7,140 | 8,220 | 6,144 | 7,220 | 7,140 | 5,480 | 5,400 |
| Coefficient of thermal expansion (ASTM D696) [(in)/(in x °F)] x 10 ^{-€} | 34 | 32 | 27 | 34 | 26 | 34 | 14 | 14 |
| Dielectric constant (ASTM D150) | 46.0 | 41.0 | 38.0 | 46.0 | 40.0 | 41.0 | 46.0 | 45.0 |
| Maximum continuous dry service temperature °F | 300 | 300 | 450 | 300 | 300 | 300 | 200 | 200 |
| Maximum continuous wet service temperature °F | 140 | 140 | 150 | 140 | 140 | 140 | N/A | N/A |

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 [®] Wear Guard™ High Impact | Devcon [®] Wear Guard™ Ultra | Devcon [®] Combo Wear FC (Fast Cure) | Devcon [®] Tile Adhesive | Devcon [®] HV Tile Adhesive |
|------------------------------------------------------------------|-------------------------------------|-------------------------------------------------|-------------------------------------------------|---------------------------------------------------|---------------------------------------------|--------------------------------------------------------|---------------------------------------------|--------------------------------------------|
| ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% | | | | | | 0 0 | \bigcirc \bigcirc \bigcirc \bigcirc | \bigcirc \bigcirc \bigcirc |
| ALCOHOLS Methanol Isopropanol | 0 | 0 0 | 00 | 0 | \bigcirc | 0 0 | 0 | 00 |
| KETONES Acetone Methyl ethyl ketone | \bigcirc | 00 | 00 | 00 | 00 | \bigcirc | \bigcirc \bigcirc | $\overset{\bigcirc}{\mathbb{O}}$ |
| ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10% | • | • | • | • | • | • | • | • |
| HYDROCARBONS Gasoline (unleaded) Mineral spirits | • | • | • | • | • | 0 | 0 | 0 |
| CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane | ● | ● | • | ● | D | O | D | D |
| SALTS Sodium chloride Trisodium phosphate | O | | • | | | | | |

Key: Excellent Very Good OFair OPoor

Elevated Temperature, **Wear-resistant Coatings**

Innovative wear-resistant epoxy coating that is designed to protect equipment against high temperature erosion, corrosion and abrasion. Long-lasting protection in both wet and dry environments upto 300°F / 148°C. Room temperature cure eliminates the need for oven bake cure. Trowelable, non-sag putty. Smooth with water.

Devcon[®] Wear Guard[™] 300RTC

Alumina ceramic bead-filled epoxy system with outstanding wear resistance for high temperature environments

- Withstands elevated service temperatures, wet and dry conditions, up to 300°F / 148°C
- Room temperature cure eliminates need for post-bake cure
- Sag-free application
- Excellent chemical resistance
- Smooth with water
- Easy to mix and apply
- Low exothermic reaction

Size: Item # 11430 30 lb





Easy to mix



Easy to apply

| Typical Properties | | | |
|-----------------------------------------------------|----------------------------------------------------------------|--|--|
| Color | Blue | | |
| Mix Ratio by Weight | 2:1 | | |
| Mixed Viscosity | Putty | | |
| Functional Cure | 8 - 10 Hours | | |
| Pot Life | 50 - 70 Minutes | | |
| Compressive Strength | 12,500 psi (86.18 MPa) | | |
| Coverage | 50 in ² / lb (711.2 cm ² /kg) @ 0.25" | | |
| Cured Hardness | 85 D | | |
| Specific volume inches/ pound | 2.2 | | |
| Coverage / Ib | 5.2 ft.lb./in.(2) | | |
| Cured Hardness | 82 Shore D | | |
| Cured Shrinkage inch/ inch | .00054 | | |
| Adhesive Tensile shear, psi | 600 psi@300°F / 150°C | | |
| Compressive Strength, psi | 12,500 | | |
| Flexural Strength, psi | 5,000 | | |
| Coefficient of thermal expansion x 10 ⁻⁶ | 43.6 | | |
| Dielectric Constant | 3.3 | | |
| Maximum continuous dry service temp. | 300°F/150°C | | |
| Maximum continuous wet service temp. | 300°F/150°C | | |



Smooth with water

Devcon

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® R-Flex®

A self-leveling urethane compound for repairing holes, tears, gouges, and protecting clips, on conveyor belts.

- Functional cure in 90 minutes
- High adhesion with surface pull of the SBR rubber
- Kit includes fluorescent surface conditioner for dark environments

Size: Item # 15550 4 lb

15656 1.5 lb

Devcon[®] Flexane[®] 80 Putty

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

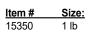
- Service temperatures to 180°F in • dry environments and 120°F in wet environments
- Bonds to metal, concrete, rubber, wood, and fiberglass surfaces

Item # Size: 15820 1 lb 15850 4 lb

Devcon® Flexane® Brushable

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

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



ABS



Shore A)

and concrete







Putty

Before: R-Flex® Repair



Before: R-Flex® Clip Repair

After: R-Flex® Clip Repair

Devcon® Flexane® High Performance

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

Cures to a tough (tear strength 400 pli), resilient rubber compound (Hardness 78

Bonds to metal, rubber, wood, fiberglass

Technical Information

| Physical Properties | Devcon [®] R-Flex [®] | Devcon [®] Flexane [®] 80 Putty | Devcon [®] Flexane [®] Brushable | Devcon [®] Flexane [®] High Performance Putty |
|------------------------------------------------------------|-----------------------------------------|------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------|
| Color | Black | Black | Black | Black |
| Mix ratio by weight resin:hardener | 88:12 | 72:28 | 80:20 | 94:6 |
| Mixed viscosity cP | Putty | Putty | 40,000 | Putty |
| Pot life minutes @ 75°F | 4 | 20 | 45 | 10 |
| Specific volume inches ³ /pound | 27.4 | 23.5 | 26.0 | 23.5 |
| Coverage per pound inches ² @ 1/4" thickness | 440 (4lb)/110 (1.5lb) | 94 | 104 | 94 |
| Functional cure hours | 1 1/2 | 12 | 18 | 16 |
| Demolding time hours | N/A | N/A | N/A | N/A |
| Cured hardness (ASTM D2240) Shore A | 92 | 87 | 86 | 78 |
| Cured shrinkage (ASTM D2566) inch/inch | NA | 0.0014 | 0.232 | 0.12 ² |
| Tensile strength (ASTM D412) psi | 1,462 | 1,700 | 3,500 | 4,500 |
| Tear resistance (ASTM D624) pli | 270 | 300 | 400 | 400 |
| Abrasion resistance weight loss ¹ | 270 | 280 | 90 | 140 |
| Maximum elongation (ASTM D412) % | 421 | 300 | 600 | 600 |
| Dielectric strength (ASTM D149) volts/mil | 350 | 350 | 340 | 350 |
| Maximum continuous wet service temperature °F | 120 | 120 | 120 | 120 |
| Maximum continuous dry service temperature °F | 180 | 180 | 180 | 180 |

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 |
|-------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------|
| ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% Sulfuric 50% Phosphoric 10% | 0000 | | 00000 | 00000 |
| ALCOHOLS Methanol Isopropanol | 00 | 0 | 00 | 0 |
| KETONES Acetone Methyl ethyl ketone | 0 | 0 | 0 | 0 |
| ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10% | | | | |
| HYDROCARBONS Gasoline (unleaded) Mineral spirits | 0 | © © | 0 | 0 |
| SALTS Sodium chloride Trisodium phosphate Aluminum sulfate 10% Sodium carbonate 10% | | | | |

Key: Excellent Very Good OFair OPoor

10

Devcor

Belting & Rubber Repair

detail.

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Item #

15250

15260

•

•

time

Size:

1 lb

10 lb

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 thixotropic versions that create a smooth surface for repairing conveyor belts.

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 semirigid rubber material

Item # Size: 15800 15810 10 lb

1 lb

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: 15940 8 oz

.

Size: Item # 19600 1 pt

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, • 400ml reusable cartridges Dispenser: #15043 (manual) Nozzle
- #15047

Item # Size: 15050 400 ml cartridge

Size: ltem # 15049

#15047

Devcon[®] Flexane[®] 94 Liquid

Low-viscosity (6,000 cP) urethane fills voids completely and faithfully reproduces mold

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

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.

| Item # | Size: |
|--------|--------------|
| 15980 | 4 oz (FL-10) |
| 15985 | 4 oz (FL-20) |

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



Devcon[®] 400ml **Dispensing System**

Manual dispensing gun and custom design mixing nozzle for 4:1 400 ml systems.

 Used with Flexane[®] Fast Cure Putty #15049 & Flexane® Fast Cure Liquid #15050

Item # Size: 15043 400ml gun Nozzle (Ø.394" 4:1 ratio) 15047

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

400 ml cartridge

Technical Information

| Physical Properties | Devcon [®] Flexane [®] 80 Liquid | Devcon [®] Flexane [®] 94 Liquid | Devcon [®] Flexane [®] Fast Cure Putty | Devcon [®] Flexane [®] Fast Cure Liquid |
|---------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|
| Color | Black | Black | Black | Grey |
| Mix ratio by weight resin:hardener | 77:23 | 69:31 | 80:20 | 80:20 |
| Mixed viscosity cP | 10,000 | 6,000 | Putty | 5,800 |
| Pot life minutes @ 75°F | 30 | 10 | 8 | 8 |
| Specific volume inches ³ /pound | 26.5 | 26.5 | 23.5 | 26.5 |
| Coverage per pound inches ² @ 1/4" thickness | 106 | 106 | 94 | 106 |
| Functional cure hours | 16 | 16 | 3 | 2 |
| Demolding time hours | 10 | 5 | N/A | N/A |
| Cured hardness (ASTM D2240) Shore A | 87 | 97 | 88 | 94 |
| Cured shrinkage (ASTM D2566) inch/inch | 0.0018 | 0.0014 | 0.0014 | 0.0018 |
| Tensile strength (ASTM D412) psi | 2,100 | 2,800 | 2,400 | 3,300 |
| Tear resistance (ASTM D624) pli | 350 | 415 | 275 | 430 |
| Abrasion resistance weight loss ¹ | 285 | 330 | 220 | 330 |
| Maximum elongation (ASTM D412) % | 650 | 500 | 500 | 450 |
| Dielectric strength (ASTM D149) volts/mil | 350 | 350 | 350 | 350 |
| Maximum continuous dry service temperature °F | 180 | 180 | 120 | 120 |
| Maximum continuous wet service temperature °F | 120 | 120 | 180 | 180 |

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

| Chemical Resistance | Devcon [®] Flexane [®] 80 Liquid | Devcon [®] Flexane [®] 94 Liquid | Devcon [®] Flexane [®] Fast Cure Putty | Devcon [®] Flexane [®] Fast Cure Liquid |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|
| ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% Sulfuric 50% Phosphoric 10% | | | | |
| ALCOHOLS Methanol Isopropanol | 0 0 | 00 | 0 | 00 |
| KETONES Acetone Methyl ethyl ketone | 0 | 8 8 | © | 0 0 |
| ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10% | | | | |
| HYDROCARBONS Gasoline (unleaded) Mineral spirits | 0 | 00 | 0 0 | 0 0 |
| SALTS Sodium chloride Trisodium phosphate Aluminum sulfate 10% Sodium carbonate 10% | | | | |

Devcon

Corrosion Repair Compounds

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Item #

11700

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 spray, a brush or trowel.

Devcon® Titanium Putty High-performance, nonrusting titaniumreinforced epoxy putty for making repairs that can be precision machined. • Withstands heavy loads in harsh chemical evironments High compressive strength Size: Item # ABS 10760 1 lb 10770 2 lb TYPE APPROVED PRODUCT

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, and erosion.

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

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| • | EXC | ellent chen |
|------|-----|-------------|
| ltem | # | Size: |
| 1178 | 0 | 1,000 r |
| 1178 | 51 | 1,000 r |
| 1428 | 39 | Straigh |
| 1427 | '9 | 90 Deg |
| 1440 |)4 | Pneum |

delivery system.

Size:

3 lb



Devcon[®] Ceramic Repair Putty

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

• Temperature range up to 350°F Excellent for filling voids and rebuilding metal castingsone application

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: |
|--------|-------|
| 11730 | 32 lb |



Sprayable, solvent-free, high performance ceramic-filled epoxy for sealing, protecting and repairing surfaces subject to erosion, corrosion and wear. Significantly reduces equipment repair time with easy-to-use

> Temperature resistance to 175°C. llent chemical resistance.

> > ml (Red) ml (Blue) ht Spray Nozzle gree Spray Nozzle Pneumatic Spray Dispenser



| Physical Properties | Devcon [®] Titanium Putty | Devcon [®] Brushable Ceramic Red, Blue | Devcon [®] Brushable Ceramic White | Devcon [®] Ceramic Repair Putty | Devcon [®] Ceramic Repair Compound | Devcon [®] EZ-Spray Ceramic |
|--------------------------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------|---------------------------------------------------|------------------------------------------------|---------------------------------------------------|-----------------------------------------|
| Color | Grey | Red, Blue | White | Dark Blue | Dark Blue | Red, 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 | 5.0:1 / 3:1 |
| Mixed viscosity cP | Putty | 32,000 | 40,000 | Putty | Putty | 30,000 |
| Functional cure hours | 16 | 16 | 16 | 16 | 16 | 16 |
| Pot life minutes @ 75°F | 21 | 40 | 21 | 25 | 45 | 40 |
| Specific volume inches ³ /pound | 11.7 | 16.9 | 16.5 | 16.4 | 17.9 | 17.1 |
| Coverage per pound inches ² @ 1/4" thickness | 47 | 7.8 ¹ | 7.6 ¹ | 66 | 72 | 7.9 ¹ |
| Cured hardness (ASTM D2240 Shore D | 87 | 85 | 84 | 86 | 86 | 85 |
| Cured shrinkage (ASTM D2566) inch/inch | 0.0010 | 0.0020 | 0.0020 | 0.0022 | 0.0024 | 0.0020 |
| Adhesive tensile shear (ASTM D1002) psi | 2,000 | 2,000 | 2,000 | 2,000 | 2,231 | 2,000 |
| Compressive strength (ASTM D695) psi | 15,200 | 13,700 | 13,200 | 12,700 | 10,240 | 13,700 |
| Flexural strength (ASTM D790 psi | 7,700 | 8,000 | 8,000 | 6,475 | 5,870 | 8,000 |
| Modulus of elasticity (ASTM D638) psi x 10⁵ | 9.5 | 8.0 | 8.0 | 8.1 | 8.1 | 8.0 |
| Coefficient of thermal expansion (ASTM D696) [(in)/(in x °F)] x 10 ⁻⁶ | 22 | 25.6 | 27.5 | 23.8 | 24.2 | 25.6 |
| Thermal conductivity (ASTM C177) [(cal x cm)/(sec x cm2 x °C)] x 10 ⁻³ | 1.95 | 19 | 19 | 1.88 | 1.72 | 19 |
| Dielectric constant (ASTM D150) | 44.8 | 38.7 | 38.7 | 41.0 | 41.0 | 38.7 |
| Dielectric strength (ASTM D149) volts/mil | 56 | 382 | 382 | 370 | 350 | 382 |
| Maximum continuous dry service temperature °F | 350 | 350 | 350 | 350 | 350 | 350 |
| Maximum continuous wet service temperature °F | 150 | 150 | 150 | 150 | 150 | 150 |

NOTES: 1 Coverage (feet2 @, 15mils)

| Chemical Resistance | Devcon® Titanium Putty | Devcon [®] Brushable Ceramic Red, Blue | Devcon [®] Brushable Ceramic White | Devcon [®] Ceramic Repair Putty | Devcon [®] Ceramic Repair Compound | Devcon [®] EZ-Spray Ceramic |
|-----------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------------------------------|------------------------------------------------|---------------------------------------------------|-----------------------------------------|
| ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% | | | | | | |
| ALCOHOLS Methanol Isopropanol | • | • | • | • | • | • |
| KETONES Acetone Methyl ethyl ketone | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | $\overset{\bigcirc}{\otimes}$ |
| ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10% | • | • | • | • | • | • |
| HYDROCARBONS Gasoline (unleaded) Mineral spirits | • | 0 | 0 | • | : | • |
| CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane | • | • | • | ٠ | • | • |
| SALTS Sodium chloride Trisodium phosphate | • | • | • | • | • | • |

Devcon

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: | |
|--------|-------|----------------------|
| 10110 | 1 lb | 1 |
| 10120 | 4 lb | ABS |
| 10130 | 25 lb | THE APPROVED PRODUCT |

Devcon[®] Stainless Steel

Putty (ST)

Item #

10270

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

ABS

THE REPORT PROCESS

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

Size:

1 lb

within one hour as low as 40°F

low as 40°F.

.

.

•

Item #

10210

10220

10230

Size: Item # 10240 1 lb



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





Size:

1 lb

4 lb

25 lb

Fast-curing, steel-filled epoxy for emergency repairs at temperatures as

Repaired parts can be returned to service

Mixes, applies, and cures at temperatures



Devcon[®] Aluminum Putty (F)

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: | 1990 B |
|--------|-------|--------------------|
| 10610 | 1 lb | ABS |
| 10620 | 3 lb | THE REPORT OF ODEC |

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: | |
|--------|-------|--------------------|
| 10710 | 1 lb | ABS |
| 10720 | 3 lb | THE REPORT OF ODEC |

| Physical Properties | 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) |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------|----------------------------------------------|
| Color | Dark Grey | Dark Grey | Dark Grey | Grey | Aluminum | Aluminum |
| 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 |
| Mixed viscosity cP | Putty | 15 / 25,000 | Putty | Putty | Putty | 15 / 25,000 |
| Functional cure hours | 16 | 16 | 1 | 16 | 16 | 16 |
| Pot life minutes @ 75°F | 45 | 45 | 5 | 58 | 60 | 75 |
| Specific volume inches ³ / pound | 11.9 | 13.1 | 12.2 | 12.4 | 17.5 | 17.5 |
| Coverage per pound inches ² @ 1/4" thickness | 48 | 52 | 49 | 50 | 70 | 70 |
| Cured hardness (ASTM D2240) Shore D | 85 | 85 | 85 | 85 | 85 | 85 |
| Cured shrinkage (ASTM D2566) inch/inch | 0.0006 | 0.0006 | 0.0006 | 0.0010 | 0.0008 | 0.0009 |
| Adhesive tensile shear (ASTM D1002) psi | 2,800 | 2,800 | 2,026 | 2,385 | 2,600 | 2,700 |
| Compressive strength (ASTM D695) psi | 8,260 | 10,200 | 10,400 | 8,400 | 8,420 | 9,820 |
| Flexural strength (ASTM D790) psi | 5,600 | 7,480 | 7,680 | 5,280 | 6,760 | 7,180 |
| Modulus of elasticity (ASTM D638) psi x 10⁵ | 8.5 | 8.5 | 7.5 | 8.0 | 8.0 | 7.5 |
| Coefficient of thermal expansion (ASTM D696) [(in)/(in x °F)] x 10 ^{.6} | 48 | 38 | 34 | 34 | 29 | 50 |
| Thermal conductivity (ASTM C177) [(cal x cm)/ (sec x cm ² x [°] C)] x 10 ⁻³ | 1.37 | 1.39 | 2.65 | 1.23 | 1.73 | 1.58 |
| Dielectric constant (ASTM D150) | 67.5 | 67.5 | 35.0 | 75.0 | 21.4 | 8.6 |
| Dielectric strength (ASTM D149) volts/mil | 30 | 30 | 30 | 30 | 100 | 100 |
| Maximum continuous dry service temperature °F | 250 | 250 | 200 | 250 | 250 | 250 |
| Maximum continuous wet service temperature °F | 120 | 120 | N/A | 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) |
|------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------|----------------------------------------------|
| ActiDS Acetic 10% Hydrochloric 10% Sulfuric 10% | | | 0 0 | | | |
| ALCOHOLS Methanol Isopropanol | \bigotimes_{\bigotimes} | 0 0 | \otimes | 00 | 00 | \bigotimes_{\bigotimes} |
| KETONES Acetone Methyl ethyl ketone | 0 0 | \bigotimes_{\bigotimes} | 00 | 0 0 | 0 0 | \bigotimes_{\bigotimes} |
| ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10% | | | 00 | | 0 | 0 |
| HYDROCARBONS Gasoline (unleaded) Mineral spirits | | | | | | |
| CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane | ٢ | | 0 | D | D | |
| SALTS Sodium chloride Trisodium phosphate | | | 000 | | | |

Devcor

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® 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 riction applications

Item # Size: 11410 1 lb 11420 3 lb

Size: Item # 10780 1 lb

leaks in pipes.

•

Devcon® Underwater Repair (UW)

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

Needs no rinsing; leaves no residue • • Evaporates fast

Devcon® Cleaner Blend 300

Item # Size: 19510 1 pt

Size: Item # 11800 1 lb

water.

•



Devcon[®] FasMetal[™]

High-performance, alumina-filled epoxy for making fast, dependable emergency repairs to

 Hardens in 5 minutes Economical and convenient



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

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

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: |
|--------|-------|
| 19770 | 1 lb |

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

1000

| Item # | Size: | ABS |
|--------|-------|---------------------|
| 19600 | 1 pt | THE APPENED PROCECT |

| con | Devcon |
|--------------|----------|
| wrhuig 01 | 192 M |
| a Davcon von | |
| | Decon un |
| 7 | 1700 |
| Devcon. | |



| Physical Properties | Devcon° Bronze Putty (BR) | Devcon [°] Wear Resistant Putty (WR-2) | Devcon [°] Underwater Repair Putty (UW) | Devcon [®] FasMetal [™] | Devcon [°] HVAC Repair (Special F) |
|-----------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------|-----------------------------------------------------|-------------------------------------------|------------------------------------------------|
| Color | Bronze | Dark Grey | Grey | Grey | Grey |
| Mix ratio by weight / volume resin:hardener | 9:1 / 3:1 | 9:1/4:1 | 1.4:1 / 1:1 | 1.07:1 / 1:1 | 0.9:1 / 1:1 |
| Mixed viscosity cP | Putty | Putty | Putty | Putty | 40,000 |
| Functional cure hours | 16 | 16 | 24 | 1 | 16 |
| Pot life minutes @ 75°F | 35 | 45 | 45 | 4 | 60 |
| Specific volume inches ³ / pound | 12.4 | 13.9 | 17.0 | 17.2 | 16.1 |
| Coverage per pound inches ² @ 1/4" thickness | 50 | 56 | 68 | 69 | 64 |
| Cured hardness (ASTM D2240) Shore D | 85 | 85 | 82 | 90 | 85 |
| Cured shrinkage (ASTM D2566) inch/inch | 0.0010 | 0.0005 | 0.0020 | 0.0093 | 0.0008 |
| Adhesive tensile shear (ASTM D1002) psi | 2,680 | 2,200 | 2,685 | 2,000 | 2,500 |
| Compressive strength (ASTM D695) psi | 8,540 | 9,800 | 5,625 | 12,700 | 8,420 |
| Flexural strength (ASTM D790) psi | 6,180 | 6,500 | 4,990 | 7,700 | 6,260 |
| Modulus of elasticity (ASTM D638) psi x 10 ^s | 8.0 | 7.5 | 7.5 | 8.5 | 7.8 |
| Coefficient of thermal expansion (ASTM D696) [(in)/(in x °F)] x 10 ^s | 33 | 32 | 18 | 32 | 29 |
| Thermal conductivity (ASTM C177) [(cal x cm)/(sec x cm ² x °C)] x 10 ⁻³ | 1.57 | 1.67 | 1.41 | 2.04 | 1.73 |
| Dielectric constant (ASTM D150) | 75.0 | 6.3 | 8.6 | 18.6 | 21.4 |
| Dielectric strength (ASTM D149) volts/mil | 25 | 400 | 150 | 370 | 100 |
| Maximum continuous dry service temperature 'F | 250 | 250 | 250 | 250 | 250 |
| Maximum continuous wet service temperature °F | 120 | 120 | 120 | N/A | 110 |

| Chemical Resistance | Devcon° Bronze Putty (BR) | Devcon [°] Wear Resistant Putty (WR-2) | Devcon [®] Underwater Repair Putty (UW) | Devcon [∘] FasMetal [™] | Devcon [®] HVAC Repair (Special F) |
|-----------------------------------------------------------|-----------------------------------------|-------------------------------------------------------|-----------------------------------------------------|-------------------------------------------|------------------------------------------------|
| ACIDS Acetic 10% Hydrochloric 10% Sulfuric 10% | \bigcirc \bigcirc \bigcirc | \bigcirc \bigcirc \bigcirc | 0 0 | \bigcirc \bigcirc \bigcirc | \bigcirc \bigcirc \bigcirc |
| ALCOHOLS Methanol Isopropanol | 000000000000000000000000000000000000000 | 0 | 000000000000000000000000000000000000000 | 00 | 0 |
| KETONES Acetone Methyl ethyl ketone | 0 | 00 | 000000000000000000000000000000000000000 | 00 | 00 |
| ALKALIS Ammonium hydroxide 20% Sodium hydroxide 10% | | | | | 00 |
| HYDROCARBONS Gasoline (unleaded) Mineral spirits | | | | | |
| CHLORINATED HYDROCARBONS 1-1-1 Trichloroethane | D | ● | | 0 | 0 |
| SALTS Sodium chloride Trisodium phosphate | | | | 0 | |

Key: Excellent Very Good Fair OPoor

Devcon.

Crusher Backing

Devcon[®] offers a unique combination of crusher backing and concave sealing solutions. High Performance Backing Compound (HPBC) is used as shock absorbing compound in cone crushing machines. This formulation is used to produce a low viscosity, tough and flexible backing material which reinforces and supports crusher wear parts, absorbs and dampens impact of the liner to the crusher, and servers as a damper when subjected to impact and shock.

High Performance Backing Compound

High-strength liquid epoxy with the necessary resiliency to withstand forces generated by crushers and mills. It serves as a backing and reinforcing layer between machine parts and as a damper when subjected to impact and shock loads.

- 100% solids no solvents
- High compression and impact strength
- Negligible shrink
- Easy to pour; easy to use
- Low exothermic reaction

| Item # | Size: |
|--------|-------|
| 81095 | 20 lb |
| 81096 | 50 lb |







| Physical Properties | High Performance Backing Compound |
|----------------------------------------------------------------------------|--------------------------------------|
| Color | Red |
| Mix ratio by weight / volume resin:hardener | 9.95:1 |
| Mixed viscosity cP | 10,320 |
| Functional cure hours | 8 |
| Pot life minutes @ 75°F | 30 |
| Specific volume inches 3/pound | 17.2 |
| Coverage per kit inches 2@ 1/4" thickness | 349 ¹ |
| Cured hardness (ASTM D2240) Shore D | 85 |
| Cured shrinkage (ASTM D2566) inch/inch | 0.0006 |
| Adhesive tensile shear (ASTM D1002) psi | 1,179 |
| Compressive strength (ASTM D695) psi | 16,059 |
| Flexural strength (ASTM D790) psi | 10,277 |
| Coefficient of thermal expansion (ASTM D696) [(in)/(in x °F)] x 10 ° | 22 |
| Side Impact (in - Ibs) | 41 |
| Maximum continuous dry service temperature °F | 250 |
| Maximum continuous wet service temperature °F | 120 |

¹ Coverage in inches² / 20.4 pound unit

| Chemical Resistance | High Performance Backing Compound |
|----------------------------|--------------------------------------|
| Ammonia | • |
| Cutting Oil | • |
| Gasoline (Unleaded) | 0 |
| Hydrochloric 10% | lacksquare |
| Hydrochloric 36% | 0 |
| Mineral Spirits | • |
| Potassium Hydroxide 20% | • |
| Potassium Hydroxide 40% | • |
| Sodium Chloride Brine | • |
| Xylene | • |
| Key: Excellent Very G | ood 🔿 Fair 🚫 Poor |

Concave Sealing

Devcon[®] Concave Sealer is ideal for sealing concave tiles that line gyratory crushers. With a 15 minute functional cure, Concave Sealer dramatically reduces repair time, the cost of crusher downtime, and lost production.

Concave Sealer

A thixotropic adhesive made to fill voids between Concave liners allowing you to pour crusher backing within 10 minutes after application. The adhesive is non-sag on a vertical surface and able to bond to any metal surface.

- Room temperature cure
- Functional in 10 minutes
- Bonds to poorly prepared surfaces Non-Sagging formula

| Item # | Size: |
|--------|-------------------|
| 81091 | 250 ml Cartridge |
| 30079 | Cartridge Nozzles |



Solids by Volume 100 15-25% Tensile Elongation 35-40 pli Tpeel Uncured Color straw 10-15 min. @ 72°F, 22°C Fixture Time Flashpoint 51°F Full Cure 24 hrs. **Functional Cure** 45 minutes Mix Ratio by Volume 1:1 Mix Ratio by Weight 100/117 Mixed Density 8.20 lbs./gal./ .98gms/cc Mixed Viscosity Thixotropic/non-sagging mperature -67°F - 250°F Adhesive: 55,000 cps; Activator: 50.000 cps Adhesive: 8.4lbs./gal.; Activator: 8.00 lbs./gal.

Physical Properties

Cured 7 days @ 75° F

Adhesive Tensile Lap Shear(ABS)

Adhesive Tensile Lap Shear(AL)

Adhesive Tensile Lap

Adhesive Tensile Lap

Shear(SS)

Shear[GBS]

Gap Fill

Cured Density

Impact Resistance

Shore Hardness

Concave Sealer

1,300 psi

2.041 psi

2,439 psi

3.500 psi

28.1 in[3]/lbs.

0.5 in.

22 ft.lb./in[2]

78 Shore D

4-6min. @ 72°F,[22°C]

| Chemical Resistance | Concave Sealer |
|------------------------|----------------|
| Acetic (Dilute) 10% | 0 |
| Ammonia | 0 |
| Cutting Oil | \bullet |
| Gasoline (Unleaded) | \bullet |
| Glycols/Antifreeze | • |
| Hydrochloric 10% | 0 |
| Motor Oil | lacksquare |
| Sodium Hydroxide 10% | lacksquare |
| | ~ ~ |

Key: Excellent Very Good Fair Poor

Devcor

Surface Preparation

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.
- 2) Remove all surface contamination (paint, rust and grime) by abrasive blasting, sanding or other mechanical means.
- 3) Degrease with Devcon[®] Cleaner Blend 300.
- 4) Abrade the surface to roughen it and create a surface profile.
- 5) Use the appropriate Devcon[®] primer.

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

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

Metal

To properly prepare a metal surface:

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



Before

Rubber

To properly prepare a rubber surface:

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

Devcon[®] product.

(on rubber only).

absorption characteristics.

procedures.



| If you have questions, please contact Technical Service: 1-855-489-7262 | Mixed Visco |
|-------------------------------------------------------------------------|--------------|
| n you have questions, please contact rechnical Service. 1-655-469-7202 | Service Tem |
| 15 160 2 | Viscosity |
| B CONTRACTOR | Weight |
| | Working Tim |
| | |
| The states of the second second | Che Resis |
| | Acetic (Dilu |



The key to a successful repair is proper preparation and thorough cleaning prior to applying repair

- Rubber to metal: Coat all metal surfaces (including stainless steel and aluminum) with two coats of Flexane® FL-10 Primer. The primer will significantly improve adhesion of Devcon products to metal.
- Rubber to metal (for immersion service): Coat any metal that will be immersed in an aqueous solution with Flexane[®] FL-10 Primer and Flexane® FL-20 Primer. First apply the FL-10 Primer and let dry for 60 minutes. Next, coat with the FL-20 Primer. Let dry for 30 minutes before applying the
- 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
- 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
- Rubber to wood or fiberglass: Coat these surfaces with Flexane® FL-20 Primer. Soft woods will require a second coat due to their
- When bonding rubber to other surfaces. contact Technical Service for a recommendation on primers and surface preparation



Concrete

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

Wet Surfaces

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

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

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

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

If you have questions, please contact Technical Service: 1-855-489-7262

Blastrac® is a registered trademark of Blastrac, NA

Agency Approvals

| Specification | Product | Part # | Size |
|-------------------------|---------------------------------------|---------------------|----------------|
| MIL-PRF-24176C, Type I | Plastic Steel® Putty (A) | 10110, 10120, 10130 | 1lb, 4lb, 25lb |
| MIL-PRF-24176C, Type I | Titanium Putty | 10760, 10770 | 1lb, 2lb |
| MIL-PRF-24176C, Type I | Ceramic Repair Putty | 11700 | 3lb |
| MIL-PRF-24176C, Type II | Aluminum Putty (F) | 10610, 10620 | 1lb, 3lb |
| MMM-A-1754 | Plastic Steel [®] Liquid (B) | 10210, 10220, 10230 | 1lb, 4lb, 25lb |
| MMM-A-1754 | Aluminum Liquid (F-2) | 10710, 10720 | 1lb, 3lb |
| ABS | Flexane [®] Brushable | 15350 | 1lb |
| ABS | Plastic Steel [®] Putty (A) | 10110, 10120, 10130 | 1lb, 4lb, 25lb |
| ABS | Plastic Steel® 5 Minute® Putty (SF) | 10240 | 1lb |
| ABS | Titanium Putty | 10760, 10770 | 1lb, 2lb |
| ABS | Stainless Steel Putty (ST) | 10270 | 1 lb |
| ABS | Ceramic Repair Putty | 11700 | 3lb |
| ABS | Plastic Steel [®] Liquid (B) | 10210, 10220, 10230 | 1lb, 4lb, 25lb |
| ABS | Aluminum Liquid (F2) | 10710, 10720 | 1lb, 3lb |
| ABS | Brushable Ceramic Red | 11760, 11762 | 2lb, 12lb |
| ABS | Brushable Ceramic Blue | 11765, 11767 | 2lb, 12lb |
| ABS | Brushable Ceramic White | 11770 | 2lb |
| NSF/ANSI 61 | Stainless Steel Putty | 10270 | 1 lb |
| NSF/ANSI 61 | Brushable Ceramic White | 11770 | 2 lb |





Devcon.

Product Index

| Product Name | Item # | Size | Page |
|---------------------------------------------------------------------------------------------------------|---------------------|----------------|------|
| Devcon [®] 400ml Dispensing System | 15043, 15047 | Gun/Mix Nozzle | 11 |
| Devcon [®] Aluminum Liquid (F-2) | 10710, 10720 | 1lb, 3lb | 1 |
| Devcon [®] Aluminum Putty (F) | 10610, 10620 | 1lb, 3lb | 1 |
| Devcon® Brushable Ceramic Blue | 11765, 11767 | | 13 |
| Devcon [®] Brushable Ceramic Red | 11760, 11762 | | 13 |
| Devcon [®] Brushable Ceramic White | 11770 | | 13 |
| Devcon® Ceramic Repair Compound | 11730 | | 13 |
| Devcon [®] Ceramic Repair Putty | 11700 | 3lb | 13 |
| Devcon [®] Cleaner Blend 300 | 19510 | 1pt | 17 |
| Devcon® Combo Wear (FC) | 11450 | | |
| Devcon® DFense Blok [™] | | | |
| Devcon® DFense Blok [™] Fast Cure (FC) | | | |
| Devcon® DFense Blok™ Power Mixer | | | |
| Devcon® DFense Blok™ Quick Patch | | | |
| Devcon [®] DFense Blok [™] Surface Wetting Agent (SWA) | | | |
| Devcon® EZ-Spray Ceramic | | | |
| Devcon® FasMetal [™] | | | |
| Devcon® Flex-Add™ | | | |
| Devcon [®] Flexane [®] 80 Liquid | | | |
| Devcon [®] Flexane [®] 80 Putty | , | | |
| Devcon [®] Flexane [®] 90 Fully Devcon [®] Flexane [®] 94 Liquid | | | |
| - | | | |
| Devcon [®] Flexane [®] Brushable | | | |
| Devcon® Flexane® Fast Cure Liquid | | 0 | |
| Devcon® Flexane® Fast Cure Putty | | - | |
| Devcon [®] Flexane [®] High Performance Putty | | | |
| Devcon [®] Flexane [®] Primer FL-10 | | | |
| Devcon [®] Flexane [®] Primer FL-20 | | | |
| Devcon [®] HVAC Repair (Special F) | | | |
| Devcon® HV Tile Adhesive | | | |
| Devcon [®] Liquid Release Agent | | - | |
| Devcon [®] Plastic Steel [®] 5 Minute [®] Putty (SF) | | | |
| Devcon [®] Plastic Steel [®] Liquid B | 10210, 10220, 10230 | 1lb, 4lb, 25lb | 1 |
| Devcon [®] Plastic Steel [®] Putty A | 10110, 10120, 10130 | 1lb, 4lb, 25lb | 1 |
| Devcon® R-Flex® | 15550, 15565 | 4lb, 1.5lb | |
| Devcon [®] Stainless Steel Putty (ST) | 10240 | 1lb | 1 |
| Devcon® Tile Adhesive | 11495 | | 6 |
| Devcon® Titanium Putty | 10760, 10770 | 1lb, 2lb | 13 |
| Devcon [®] Wear Guard [™] Fine Load | 11470 | | (|
| Devcon® Wear Guard [™] High Impact | 11460 | | (|
| Devcon® Wear Guard [™] High Load | | | |
| J Devcon® Wear Guard [™] High Temp | | | |
| Devcon® Wear Guard [™] Ultra | | | |
| Devcon [®] Wear Guard [™] 300RTC | | | |
| Devcon [®] Wear Resistant Putty (WR-2) | | | |
| Devcon [®] Underwater Repair Putty (UW) | | | |
| High Performance Backing Compound | | | |
| Concave Sealer | | | |

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The technical information, recommendations, and other statements contained in this brochure are based upon tests or experience that ITW Performance Polymers believes are reliable, but the accuracy or completeness of such information is not guaranteed. The information provided is not intended to substitute for the customers own testing.







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