



Flexane[®] 80 Putty

Description:	Trowelable urethane for repairing and lining process equipment exposed to wear, impact, abrasion, vibration, and expansion/contraction.
Intended Use:	Industrial Use: Repair and rebuild conveyor belts, Line process equipment to dampen noise, Line concrete control joints, Cast flexible molds, fixtures, and parts, Pot and encapsulate.
Features:	Trowels on smoothly, Cures to tough, medium-hard rubber (Shore 87A)
Limitations:	Suitability of product is determined by the end user for their application and process.

Typical Physical Properties: Technical data should be considered representative or typical only and should not be used for specification purposes.

Cured 7 Days @ 75°F (24°C)

	Typical Values
Cured Shrinkage	0.0014 in/in (cm/cm)
Dielectric Strength	350 volts/mil (13.78 KV/mm)
Hardness	87 Shore A
Maximum Elongation	300%
Maximum Operating Temperature	Dry: 180°F (82°C); Wet 120°F (49°C)
Percent Solids by Volume	100
Taber Abrasion (H-18, dry)	0.238 cm ³ (1000g, 1000 revs)
Tear Resistance	300 pli (53 N/mm)
Tensile Strength	1,700 psi (12 MPa)

Standard Tests

Dielectric Strength, volts/mil ASTM D 149
Tensile Strength (Urethanes) ASTM D 412
Cured Hardness Shore D ASTM D 2240
Cure Shrinkage ASTM D 2566
Tear Resistance ASTM D 624
Maximum Elongation ASTM D 412

Uncured Properties @ 72°F (23°C)

Color	Black
Coverage (1/4" / 6.35mm)	94 in ² /lb (1337 cm ² /Kg)
Demolding Time	10 hrs.
Functional Cure	12 hours
Mix Ratio	72 resin : 28 curing agent by weight
Mixed Viscosity	Putty
Pot Life	20 min. @ 75°F (24°C)
Specific Volume	23.5 in ³ /lb (0.849 cm ³ /g)

Surface Preparation: For METAL SURFACES, thoroughly clean area to be repaired, rebuilt, or lined with Devcon® Cleaner Blend 300. Remove any oil, grease, or dirt. Roughen surface by grinding with a coarse wheel or an abrasive disc pad. To prime this surface, apply a coat of Devcon FL-10 Primer and allow to dry tack-free for 5-15 minutes. If the metal surface requires maximum tear resistance or is exposed to moisture, or if submerged in water, use Devcon® FL-10 and Devcon® FL-20 Primer.

For RUBBER SURFACES, thoroughly clean area with an abrasive pad and Devcon® Cleaner Blend 300. Surface can also be roughened with a grinding wheel so that it is coarse and free from oil and dirt that may clog the "pores" of the rubber. Wipe or roughen surface with Cleaner Blend 300 until the cloth no longer picks up the color of the rubber. The rubber should appear new or deeper in color. To prime this surface, apply a coat of Devcon® FL-20 Primer and allow to dry tack-free for 15-20 minutes. Use Devcon® FL-40 Primer on "hard-to-bond" rubber surfaces as this gives ultimate peel resistance. Multiple coats may be necessary for porous rubber surfaces.

For MAXIMUM ADHESION, sandblast the surface with an angular abrasive until a minimum depth profile of 2-3 mils is met. Blast to near-white finish specification SSPC-SP5 (Steel Structure Painting Council). Prime surface immediately after sandblasting to prevent oxidation.

Mixing Instructions: ---- To ensure proper cure speeds and hardness, mix Flexane at a temperature between 65°F-85°F (18-29°C). ----

FOR 400ML CARTRIDGES:

1. Attach mix nozzle to cartridge
2. Follow application instructions; no mixing is required.

FOR 10LB. UNITS:

Use a propeller-type Jiffy Mixer Model ES on an electric drill.

Mix until color is uniform and consistent (approx. 4-6 min.).

NOTE: Completely submerge propeller, otherwise large amounts of air will be added resulting in air bubbles on the finished product's surface.

Application Instructions: ---- FOR MAXIMUM ADHESION, apply a suitable Devcon primer to all substrates prior to application. ----

Metals	FL-10 Primer
Rubber	FL-20 Primer
Wood	FL-20 Primer
Fiberglass	FL-20 Primer
Concrete	FL-20 Primer
Rigid Plastics	FL-20 Primer (2 coats)

- 1 – Using a short tight nap utility applicator Brush, apply a thin coat of Flexane 80 Putty, to help wet the surface and to fill in difficult to reach voids and gaps.
- 2 – Spread required amount of the putty over the substrate with a spatula (stainless steel spreader) or a similar tool.
- 3 - Press the material firmly into all cracks and voids to ensure maximum surface contact while avoiding to entrapping air.
- 4 - Allow the product to cure Ten (10) hours before returning equipment to light service. The repair may then be finished to a desired profile using a 24 or 36 grit sanding disc. Do not overheat the work surface. Cure to 100% capacity takes seven (7) days @ 70°F (25°C).

ADDITIONAL INFORMATION

Flex-Add Flexibilizer is used with Flexane 80 to produce a urethane with a durometer below 87A. This allows for custom mixing of urethanes for specific applications requirements. (See Flex-Add TDS for further information)

Flexane Accelerator is used to increase Flexane's cure speed at temperatures as low as 32°F (0°C). One-half tsp. (2 gms) of Accelerator reduces the cure time of 1 lb. of Flexane by 50%. Use 2 tsp. or less of Accelerator for each 1 lb. of Flexane. See Flexane Accelerator TDS for further information.

Storage: Store in a cool, dry place.

Compliances: None

Chemical Resistance: Chemical resistance is calculated with a 7-day, room temp. cure (30 days immersion) @ 75°F (24°C)

1,1,1-Trichloroethane	Poor
Aluminum Sulfate 10%	Very good
Cutting Oil	Fair
Gasoline (Unleaded)	Poor
Hydrochloric 10%	Very good
Hydrochloric 36%	Very good
Isopropanol	Poor
Methyl Ethyl Ketone	Poor

Phosphoric 10%	Very good
Potassium Hydroxide 40%	Very good
Sodium Hydroxide 50%	Very good
Sodium Hypochlorite	Very good
Xylene	Poor

Precautions: **FOR INDUSTRIAL USE ONLY:** Please refer to the appropriate Safety Data Sheet prior to using this product.

Warranty: ITW Performance Polymers will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

Order Information:

Item No.	Package Size
15800	1 lb. (0.45 Kg) kit
15810	10 lb. (4.5 Kg)

Contacts:

www.itwpp.com ITW Performance Polymers (EMEA) Bay 150, Shannon Industrial Estate Shannon, County Clare, Ireland V14 DF82 TEL: +353 61 771 500 FAX: +353 61 471 285 Email: customerservice.shannon@itwpp.com	ITW Performance Polymers (US) 30 Endicott Street Danvers, MA 01923 USA TEL: 855 489 7262 FAX: 978 774 0516 Email: info@itwpp.com
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Disclaimer:

Product Use: The information herein is based upon good faith testing that ITW PP believes are reliable, but the accuracy or completeness of such information is not guaranteed. Many factors beyond ITW PP control and uniquely within user's knowledge and control can affect the use and performance of an ITW PP product in a particular application. Given the variety of influencers on performance, the data here is not intended to substitute end user testing. It is the end users sole responsible for evaluating any ITW PP product and determining whether it is fit for a particular purpose and suitable for user's design, production, and final application.

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