Technical Data Sheet
Version 4. 12/2024

Flexane® Fast Cure Rubber Repair Putty

Description: A fast-curing, flexible urethane for repairing rubber equipment.

Intended Use: Industrial Use: Repair worn or damaged rubber equipment; form protective linings in equipment subject to wear, impact, abrasion, vibration, expansion, and contraction.

Features: **Fast cure, Room temp.**

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	Standard Tests
Abrasion Resistance	220 mg loss per 1,000 revol.	Cure Shrinkage ASTM D 2566
Dielectric Strength	350 volts/mil (13.78 kV/mm)	Tear Resistance ASTM D 624
Hardness	88 Shore A	Maximum Elongation ASTM D 412
Maximum Elongation	500%	Dielectric Strength, volts/mil ASTM D 149
Maximum Operating Temperature	Dry: 180°F (82° C); Wet: 120°F (49°C)	Cured Hardness Shore D ASTM D 2240
Percent Solids by Volume	100	Tensile Strength (Urethanes) ASTM D 412
Tear Resistance	275 pli (48 N/mm)	
Tensile Strength	2,400 psi (16.5 MPa)	
Uncured Properties @ 72°F (23°C)		
Color	Black	
Coverage (1/4" / 6.35mm)	94 in^2/lb (1337 cm^2/kg)	
Cured Shrinkage	0.0014 in/in (cm/cm)	
Functional Cure	3 hrs.	
Light Duty Service	2 hrs	
Mix Ratio	80 resin:20 curing agent /wt	
Mixed Viscosity	Thixotropic paste	
Pot Life	8 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°C to 29° C)

FOR 1 LB. UNITS

1.Add hardener to resin.
2.Vigorously mix with screwdriver or spatula for two minutes, while continuously scraping material away from sides and bottom of container. NOTE: Flexane putties will thicken rapidly during these first two minutes of mixing, but this DOES NOT mean that the polymer is curing.
3.Transfer the mixed material to the plastic container (included in kit).
4.Wipe spatula clean, and stir again for two more minutes.
5.Continue to mix until a uniform, streak-free consistency is obtained.

FOR 4 LB. UNITS:

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

Mix until color is uniform and consistent (approx. 4-6 min.), while continuously scraping material away from sides and bottom of container.

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

Application

FOR 400 ml cartgs.

1. Mount cartridge onto manual gun (#15043) or pneumatic gun (#15041).

Instructions:

2. Attach #15047 mix nozzle (used with both cartridges).
3. Clip mix nozzle back to desired orifice size.
4. Squeeze cartridge, allowing first THREE INCHES of material to discharge until a unified mix is exuding from nozzle (color is uniform with no striations).
5. Finish application as quickly as possible.

IMPORTANT:
Replace mix nozzle every four minutes to ensure complete mix, with no soft spots. Because of the short pot life (8 minutes), stopping between uses can result in Flexane product curing IN the mix nozzle. Further mixing will be off ratio.

Storage:

Store at room temperature, 70 °F (21°C)

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
Isopropyl	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 **S**afety **D**ata **S**heet 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**
15049	400 ml cartg.

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

Disclaimer: