

Product Description

Wasser Polyflex 55 is a high-performance polyurethane-polyurea highly cross-linking elastomeric coating specially designed to provide a superior chemical and abrasion resistant performance by regular methods of application.

Product Features

- Excellent chemical resistance
- High film build in one coat
- Can be used for full coating or as a repair kit
- Applied by brush, roller, squeegee and spray by conventional or plural-component spraying equipment such Graco XM Series
- Exceptional hardness and toughness
- Excellent hydrophobic & water proofing performance
- Cold weather cure for temperatures down to 15°F (- 10°C)
- Excellent wear/abrasion resistance

Area of Use

Substrates

- Steel
- Concrete

Possible Uses

- Protection on steel and concrete surfaces from occasional splashing of chemicals
- Interior lining of tanks and pipes
- Chemical resistant flooring
- Protection of mining equipment from abrasion wear and chemicals

Ready Reference Information

Color: Dark colors

Gloss: High Gloss

***Solids by volume:** 76 - 80 %

***Solids by weight:** 82 - 86 %

V.O.C.: 2.08lbs/gal (250 g/l)

Recommended dry film thickness/coat:
13 - 28 mils depend on the application

Recommended wet film thickness:
17 - 35 mils depend on the application

Theoretical Coverage:
At 1 mil: 1237 ft²/gal (25µm: 30.4m²/l)

***Kit Viscosity:** 80 - 100 ku

***Kit Specific gravity:** 1.2 - 1.45 kg/l

Ratio: 1:1 by volume, Catalyst WP55A.0

Pot Life: 15 - 20 minutes undiluted
30 - 40 minutes with 20% dilution

Recommended coating systems:

Steel Substrate

1st coat (optional)/MC-Miozinc 100: 3-5 mils DFT (76-127µm DFT)
or MC-Universal 100: 4-5.5 mils DFT (100-139µm DFT)
2nd coat / Polyflex 55: 6.5-14 mils DFT (165-356µm DFT)
3rd coat / Polyflex 55: 6.5-14 mils DFT (165-356µm DFT)

Concrete Substrate

1st coat / MC-Universal 100: 4-5.5 mils DFT (100-139µm DFT)
or Polyflex 111: 8-10 mils DFT (203-254µm DFT)
2nd coat / Polyflex 55: 6.5-14 mils DFT (165-356µm DFT)
3rd coat / Polyflex 55: 6.5-14 mils DFT (165-356µm DFT)

**Data may vary for different colors*

DRY TIMES

68°F/20°C (20 mils (0,5 mm) DFT)

Tack Free	2 hours
Re-coat	2 hours
Hard Dry	10 hours

Substrate Temp	Dust Free	Hard Dry
84 - 95°F (29 - 35°C)	1 hour	5-6 hours
61 - 83°F (16 - 28°C)	2 -2.5 hours	10-12 hours
41 - 60°F (5 -15°C)	18-20 hours	40-48 hours

**RE-COATING TIME

Minimum	Maximum
1 hour	4 hours
2 hours	6 hours
4 hours	8 hours

****Abrade slightly after recoat has lapsed, or Polyflex solvent surface activator WP50.0 should be used.**

Surface Preparation

Remove all detrimental foreign matter such as oil, grease, dirt, soil, salts, drawing and cutting compounds and other contaminants from steel surfaces.

General use: If applied by squeegees, the dilution is not required, for application with spray equipment, could be diluted with 20% W41.0.

Use one of the following recommendations:

1. Prepare surface in accordance with SSPC –SP – 1 (solvent cleaning)
2. Prepare surface in accordance with SSPC –SP – 5 (white metal blast cleaning) for immersion
3. Prepare surface in accordance with SSPC –SP – 6 (commercial blast cleaning) for better chemical resistance

Apply Wasser Moisture cure primer (MC-Universal 100) before application of Polyflex 54
(Refer to correspondent TDS for that products)

Application Information

Application by spray, brush, roller (synthetic roller with ¼-½ inch nap) or squeegee. Smooth applied surface with roller 5 minutes after application by squeegee.

Mixing and Thinning

First, power mix the base portion Polyflex 55 until it becomes homogeneous. Secondly, add catalyst 55C slowly with continued agitation until the both base & catalyst parts are well mixed together. Then product is ready for immediate use.

Dilution when applied by:

Air spray and airless spray: 20% dilution (by volume) with solvent W41.0 if necessary

Brush, roller, squeegee or Graco XM Series: Dilution is not required

Airless Spray:

Pump Ratio:	30:1
Pressure:	1500-3000 psi
Hose:	¾", 50' Max
Tip Size:	0.15-0.021
Filter Size:	50 mesh (300 µm)

Conventional Spray: (DeVilbiss MBC, JGA or equivalent)

Fluid Nozzle:	E Fluid Tip
Air Cap:	704 or 765
Atomizing Air:	45 - 75 lbs.
Fluid Pressure:	15 - 20 lbs.
Hose:	½" ID; 50' Max

Performance Testing Data

Properties under tension:

(ASTM D 412-C)	Ultimate Elongation = 25%	Tensile Strength = 5177 PSI (35.7 N/mm ²)
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Adhesion by pull-off strength:

(ASTM D 4541)	MC-Universal 100 = 800 PSI (5.5 N/mm ²)
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Hardness:

(ASTM D 2240)	65 Shore D
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Taber abrasion resistance:

(ASTM D-4060) 1000 cycles, 1000g load	38 mg (CS-17 wheel)
(ASTM D-4060) 1000 cycles, 1000g load	550 mg (H-18 wheel)

Impact resistance:

(ASTM D 2794)	Direct @ 77°F (25°C): 52 in-lb (5.9 joules)
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Special instructions

- Thinner can be added depending on local voc and air quality regulations
- Surface temperature must be at 3°C (5°F) above the dew point during application
- When applied as a repairing coating, the repairing damaged area should be removed completely with the careful sanding, dusting off and solvent cleaning of underneath primer or substrate (depends where the delaminating and peeling off have been examined) to provide the highest intercoat adhesion value

Ordering Information

Product Numbers: WP55A.0 (catalyst)
WP55B.0 (resin)

Package Size: Base 1 gal. (3.78l)
Catalyst 1 gal. (3.78l)

Shelf Life: 1 year, @ 77°F (25°C) unopened

Flash Point: 75.2°F (24°C)

Safety Precautions

Precaution:

See the material safety data sheet and product label for complete safety and precaution requirements.

"The following is made in lieu of all warranties, expressed or implied: Manufacturer's obligation shall be to replace such quantity of the product proven to be defective. The manufacturer shall not be liable for any injury, loss or damage, direct or incidental or consequential, arising out of the use of or the inability to use the product. Before using, the user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith. All values shown are approximations. Values indicated are for guide purposes only, as actual values can change due to application conditions, application methods, environmental conditions etc. The information contained herein is subject to change without notice." Contact your Wasser Representative for current Product Data Sheets.