

## Product Description

Wasser Polyflex 54 is a high performance polyurethane-polyurea iron oxide based elastomeric coating specially designed to provide a superior anti-corrosion performance by regular methods of application.

## Product Features

- Excellent anti-corrosion & hydro insulation characteristics
- High film build in one coat
- Applied by brush, roller, squeegee and spray by conventional or plural-component spraying equipment such Graco XM Series
- Excellent hydrophobic & water proofing performance
- Cold weather cures for temperatures down to 15°F (-10°C).
- Good abrasion and chemical resistance
- Outstanding hardness

## Area of Use

### Substrates

- Steel
- Concrete

### Possible Uses

- Long term protection of steel and concrete surfaces against corrosion
- Effective anti-corrosion protection on exterior parts of pipes and tanks

## Ready Reference Information

**Color:** Any color

**Gloss:** Satin

**\*Solids by volume:** 84 - 86 %

**\*Solids by weight:** 89 - 91 %

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

**Recommended dry film thickness/coat:**

20 - 30 mils depend on the application

**Recommended wet film thickness:**

25 - 35 mils depend on the application

**Theoretical Coverage:**

At 1 mil: 1345 ft<sup>2</sup>/gal (25µm: 33.07m<sup>2</sup>/l)

**Reduction solvent** (If necessary): W41.0

**Dilution** (If necessary): 20% by volume

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

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

**Ratio:** 1:1 by volume, Catalyst WP54A.0

**Pot Life:** 20 - 30 minutes without dilution  
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 54: 10-15 mils DFT (254-381µm DFT)

3rd coat / Polyflex 54: 10-15 mils DFT (254-381µm 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 54: 10-15 mils DFT (254-381µm DFT)

3rd coat / Polyflex 54: 10-15 mils DFT (254-381µm DFT)

*\*Data may vary for different colors*

## DRY TIMES

**68°F/20°C (20 mils (0,5 mm) DFT**

<b>Tack Free</b>	1.5 - 3 hours
<b>Re-coat</b>	5 hours
<b>Hard Dry</b>	6-7 hours

Substrate Temp	Dust Free	Hard Dry
84 - 95°F (29 - 35°C)	1.5-3 hours	6-7 hours
61 - 83°F (16 - 28°C)	3-5 hours	23-26 hours
41 - 60°F (5 - 15°C)	18-20 hours	40-48 hours

## \*\*RE-COATING TIME

Minimum	Maximum
2 hours	6 hours
4 hours	36 hours
8 hours	72 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 a 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 54 until it becomes homogeneous. Secondly, add catalyst 54C 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 and roller or squeegee or special plural spraying equipment XM Series : No dilution is necessary

### 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 = 90%	Tensile Strength = 1088 PSI (7.5N/nm <sup>2</sup> )
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### Adhesion by pull-off strength:

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

(ASTM D 2240)	80 Shore A
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### Taber abrasion resistance:

(ASTM D-4060) 1000 cycles, 1000g load	120 mg (CS-17 wheel)
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### Impact resistance:

(ASTM D 2794)	Direct @ 77°F (25°C): 140 in-lb (15.8 joules)
	Indirect @ 77°F (25°C): 120 in-lb (13.6 joules)

## Special instructions

- Thinner can be added depending on local voc and air quality regulations
- Surface temperature must be at 5°F (3°C) above the dew point during application

## Ordering Information

**Product Numbers:** WP54A.0 (catalyst)  
WP54B.0 (resin)

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

**Shelf Life:** 2 years, @ 77°F (25°C) unopened

## 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.