Polyflex 53 polyurea

Product Description

Wasser Polyflex 53 is a high performance polyurethane-polyurea thick elastomeric coating that was specially designed in order to provide high waterproofing performance by regular methods of application.

Product Features

- High hydro insulation and water proofing
- Good elasticity and flexibility
- High film build in one coat
- Can be used for full coating, repair kit, bonding layer
- Applied by brush, roller, squeegee, airless or conventional spray
- Cold weather cures temperatures down to 15°F (-10°C)
- **Excellent impact resistance**

Area of Use

Substrates

- Steel
- Concrete
- Wood

Possible Uses

- Water proofing of concrete and wooden surfaces and industrial civilian buildings
- Self-leveling & crack filling floor application

Ready Reference Information

Color:	Any color	Recommended dry film thickness/coat:
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Gloss: Semi-gloss Recommended wet film thickness:

*Solids by volume: 72 - 76 % **Theoretical Coverage:**

*Solids by weight: 80 - 84 %

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

Reduction solvent (if necessary): W41.0

Dilution (if necessary): 10% by volume

^{*}Data may vary for different colors

DRY TIMES	68°F/20°C (20 mils (0,5 mm) DFT		
Tack Free	3 hours		
Re-coat	6 hours		
Hard Dry	23 hours		

18 - 27 mils depend on the application

25 - 35 mils depend on the application

At 1 mil: 1187 ft²/gal (25µm: 29.1m²/l)

*Kit Viscosity: 80 - 100 ku

*Kit Specific gravity: 1.2 - 1.45 kg/l Ratio: 2:1 by volume, Catalyst WP53A.0

Pot Life: 1 hour when mixed

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 53: 9-13.5 mils DFT (229-343µm DFT) 3rd coat / Polyflex 53: 9-13.5 mils DFT (229-343µm 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 53: 9-13.5 mils DFT (229-343µm DFT) 3rd coat / Polyflex 53: 9-13.5 mils DFT (229-343µm DFT)

			**RE-COATING TIME	
Substrate Temp	Dust Free	Hard Dry	Minimum	Maximum
84 - 95°F (29 - 35°C)	1.5-3 hours	6-7 hours	4 hours	16 hours
61 - 83°F (16 - 28°C)	3-5 hours	23-26 hours	6 hours	36 hours
41 - 60°F (5 -15°C)	18-20 hours	40-48 hours	8 hours	96 hours

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

Polyflex 53 polygreg



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 10% W41.0.

Use one of the following recommendations:

- 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 53(Refer to correspondent TDS for that products)

Application Information

Application by spray, brush, roller (synthetic roller with $\frac{1}{4}$ - $\frac{1}{2}$ 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 53 until it becomes homogeneous. Secondly, add catalyst 53C 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: 10% dilution (by volume) with solvent W41.0 if necessary

Brush and roller or squeegee: Dilution is not required

Airless Spray:

Pump Ratio: 30:1

Pressure: 1500-3000 psi Hose: 3/8", 50' Max Tip Size: 0.15-0.021 Filter Size: 50 mesh (300 μm)

Conventional Spray: (DeVilbis 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 Tensile Strength = $1900 \text{ PSI } (13.1 \text{N/nm}^2)$

Adhesion by pull-off strength:

(ASTM D 4541) MC-Universal 100 = 800 PSI (5.5 N/mm²)

Hardness:

(ASTM D 2240) 80 Shore A

Taber abrasion resistance:

(ASTM D-4060) 1000 cycles, 1000g load 130 mg (CS-17 wheel)

Impact resistance:

(ASTM D 2794) Direct @ 77°F (25°C): 160 in-lb (18.0 joules) Indirect @ 77°F (25°C): 160 in-lb (18.0 joules)

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

Ordering Information

Product Numbers: WP53A.0 (catalyst)

WP53B.0 (resin)

Package Size: 2 gal (7.57l) in a 3 gal (11.36l) container

Catalyst 1 gal. (3.78l)

Shelf Life: 1 year, @ 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.