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

Color: Any color
Gloss: Semi-gloss
*Solids by volume: 72 - 76 %
*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

Recommended dry film thickness/coat: 18 - 27 mils depend on the application
Recommended wet film thickness: 25 - 35 mils depend on the application
Theoretical Coverage:
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

<table>
<thead>
<tr>
<th>Substrate Temp</th>
<th>Dust Free</th>
<th>Hard Dry</th>
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</thead>
<tbody>
<tr>
<td>84 - 95°F (29 - 35°C)</td>
<td>1.5-3 hours</td>
<td>6-7 hours</td>
</tr>
<tr>
<td>61 - 83°F (16 - 28°C)</td>
<td>3-5 hours</td>
<td>23-26 hours</td>
</tr>
<tr>
<td>41 - 60°F (5 - 15°C)</td>
<td>18-20 hours</td>
<td>40-48 hours</td>
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**Abrade slightly after re-coat has lapsed, or Polyflex solvent surface activator WP50.0 should be used.

www.wassercoatings.com 800.627.2968
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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:
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 53 (Refer to correspondent TDS for that products)

Application Information

Application by spray, brush, roller (synthetic roller with 1/4-1/2 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: 1/2” ID; 50’ Max

Performance Testing Data

Properties under tension:
- (ASTM D 412-C) Ultimate Elongation = 240%
- (ASTM D 4541) Tensile Strength = 1900 PSI (13.1N/mm²)

Adhesion by pull-off strength:
- (ASTM D 4060) 1000 cycles, 1000g load = 130 mg (CS-17 wheel)

Hardness:
- (ASTM D 2240) = 80 Shore A

Taber abrasion 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)

Impact resistance:
- 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.