

# PPG AQUATAFLEX® 506 Hybrid Coating

## DESCRIPTION

100% solids epoxy/polyurethane/polyurea hybrid coating designed for fast curing and high chemical resistance

## PRINCIPAL CHARACTERISTICS

- USDA BioPreferred® certified bio-based product
- Meets NSF/ANSI Standard 61 for potable water tanks and pipes
- Excellent chemical resistance
- USDA/FSIS acceptable
- TYPICAL USES:
- Wastewater structures, buried pipelines, tanks and other corrosive environments
- Potable water tanks, reservoirs, basins and pipes
- Primary or secondary containment applications

## COLOR AND GLOSS LEVEL

- Blue, Tan
- Semi-gloss

Notes:

- Color changes can occur under UV-exposure without negative impact on the product performance
- Listed colors are standard available colors for finished product.

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
<b>Number of components</b>	Two
<b>Mass density</b>	8.9 lb/US gal (1.1 kg/l)
<b>Volume solids</b>	100 ± 2%
<b>VOC (Supplied)</b>	EPA Method 24: 0.0 lb/US gal (2.9 g/l)
<b>Recommended dry film thickness</b>	20.0 - 300.0 mils (500 - 7620 µm) per coat
<b>Theoretical spreading rate</b>	81 ft <sup>2</sup> /US gal for 20.0 mils (2.0 m <sup>2</sup> /l for 508 µm) 5 ft <sup>2</sup> /US gal for 300.0 mils (0.1 m <sup>2</sup> /l for 7620 µm)
<b>Dry to touch</b>	20 seconds
<b>Overcoating Interval</b>	Maximum: Not applicable Maximum: 8 hours
<b>Curing time</b>	24 hours
<b>Full cure after</b>	14 days

Notes:



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- Curing time reflects ready for service time
- The shelf life for the unmixed components (Part A and Part B) for this product is 6 months at 70°F (21°C).
- Material should be stored in dry conditions, out of direct sunlight, and in unopened original factory containers, at temperatures above 60°F (16°C) and below 95°F (35°C)
- If overcoat time is exceeded, abrade and clean surface before recoating
- See ADDITIONAL DATA – Spreading rate and film thickness

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## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### **Steel (immersion service)**

- Remove all surface contaminants, oil and grease in accordance with SSPC SP-1
- Abrasive blast with an angular abrasive to an SSPC SP-10 cleanliness or higher. Achieve a surface profile of 3.0 – 5.0 mils (75 – 125 µm)
- Ensure surface is dust free after blasting

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### **Steel (non-immersion service)**

- Remove all surface contaminants, oil and grease in accordance with SSPC SP-1
- Abrasive blast with an angular abrasive to an SSPC SP-6 or higher. Achieve a surface profile of 2.5 – 4.0 mils (65 – 100 µm)
- Ensure surface is dust free after blasting

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### **Concrete / Masonry**

- All surfaces must be sound, dry, clean, free of oil, grease, dirt, mildew, curing compounds, loose and flaking paint, and other foreign substances
- Abrade surface to achieve a surface profile equivalent to CSP 3 to CSP 5 in accordance with ICRI 310.2R-2013
- New concrete must cure a minimum of 28 days prior to application of this product
- Prepare in accordance with SSPC SP-13 guidelines
- Concrete pH must be 7.0 or higher

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### **Ductile iron**

- All oils, small deposits of asphalt, paint, and grease shall be removed by solvent cleaning per NAPF 500-03-01
- Abrasive blast in accordance with NAPF 500-03-04

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### **Substrate temperature and application conditions**

- Substrate temperature during application should be between 40°F (4°C) and 140°F (60°C)
  - Relative humidity should not exceed 90%
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## SYSTEM SPECIFICATION

- Primer for concrete: PPG RAVEN® 175 Primer, PPG RAVEN® 171FS Primer, PPG VF20 Primer
- Primer for Carbon Steel: PPG AQUATAPOXY® 190 Primer\*
- Primer for non-ferrous metals: PPG AQUATAPOXY® 190 Primer\*
- Tie-Coat: PPG RAVEN® 161 Primer

Note:

- \*Do not use this primer if immersion temperatures will exceed 140°F (60°C)

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## INSTRUCTIONS FOR USE

### **Mixing ratio by volume: Part A to Part B 1:1**

- Material requires heated plural component airless spray set-up
- Part A does not require pre-mixing.
- Part B component must be thoroughly mixed prior to use.
- Mix Part B using three-tier, collapsible blade power mixer through the center bung hole
- Mixer diameter should be 1/3 of the diameter of the container
- Mix for at least 30 minutes prior to processing
- Properly mixed material will be a uniform color without light or dark spots

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### **Airless spray: Plural component**

- Material and equipment temperatures must be kept at 70°F (21°C) or above
- A drum mixer is required for Part B component
- Equipment capable of maintaining a minimum of 2500 psi at the tip without surge and 160°F (71°C)
- Heated hoses are required
- Recirculation is required for both components

### **Recommended thinner**

No thinner should be added

### **Nozzle orifice**

Approx. 0.031 – 0.035 in (0.78 – 0.89 mm)

Note:

- Prior to spraying, drums need to be pre-heated to a minimum of: Part A 70°F (21°C); Part B 120°F (49°C)

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## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
40.0 mils (1016 µm)	40 ft <sup>2</sup> /US gal (1.0 m <sup>2</sup> /l)
60.0 mils (1524 µm)	27 ft <sup>2</sup> /US gal (0.7 m <sup>2</sup> /l)
80.0 mils (2032 µm)	20 ft <sup>2</sup> /US gal (0.5 m <sup>2</sup> /l)
100.0 mils (2540 µm)	16 ft <sup>2</sup> /US gal (0.4 m <sup>2</sup> /l)
125.0 mils (3175 µm)	13 ft <sup>2</sup> /US gal (0.3 m <sup>2</sup> /l)
300.0 mils (7620 µm)	5 ft <sup>2</sup> /US gal (0.1 m <sup>2</sup> /l)

## DISCLAIMER

- For industrial or professional use only
- PPG Protective & Marine Coatings does not accept any responsibility or liability for any odor, taste or contamination imparted to the drinking water from the coatings or products retained in the coating
- This product is specifically suitable for use on the substrates mentioned in this document. For application on any other substrates, please always contact your distributor or PMC representative for specific instructions and in order to make sure that the product performance can be safeguarded.

## SAFETY PRECAUTIONS

- Although this is a solvent-free paint, care should be taken to avoid inhalation of spray mist, as well as contact between the wet paint and exposed skin or eyes
- Read all label and Safety Data Sheet (SDS) information prior to use

## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

## REFERENCES

- Information sheet | Explanation of product data sheets

## WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.



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