PPG AQUATAPOXY® A-6 Thick

DESCRIPTION

100% solids, ultra-high build, corrosion-resistant epoxy coating that can be applied to dry or damp surfaces

PRINCIPAL CHARACTERISTICS

- Solvent free
- Resists corrosion
- Will set up, adhere and cure underwater
- Bonds to dry and damp concrete, masonry, steel and ductile iron
- Meets the requirements of AWWA D102
- Meets the requirements of NSF/ANSI Standard 61/600 for potable water tanks and pipes
- TYPICAL USES:
- Potable water tanks, reservoirs, basins and pipes
- Water mains, distribution and transmission lines

COLOR AND GLOSS LEVEL

- Part A is White, Part B is Brown; Mixed product is Off-White
- Other ANSI/NSF 61 colors available are black, blue and grey.
- Semi-gloss

Note:

- Color changes can occur under UV-exposure without negative impact on the product performance

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	12.5 lb/US gal (1.5 kg/l)
Volume solids	100%
VOC (Supplied)	EPA Method 24: 0.0 lb/US gal (2.7 g/l)
Recommended dry film thickness	20.0 - 120.0 mils (500 - 3000 µm) per coat
Theoretical spreading rate	13 ft^2/US gal for 120.0 mils (0.3 m^2/l for 3000 µm)
Dry to touch	4 hours
Overcoating Interval	Minimum: Coating should no longer leave residue when touched with a gloved finger Maximum: 12 Hours
Curing time	8 hours
Shelf life	Part A: at least 12 months when stored cool and dry Part B: at least 12 months when stored cool and dry

Notes:

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- See ADDITIONAL DATA – Spreading rate and film thickness
- If overcoat time is exceeded, abrade and clean surface before recoating
- Curing time for standard service is 8 hours at 77°F (25°C); for NSF 61 service, the curing time is 3 days at 77°F (25°C)
- Material should be stored in dry conditions, out of direct sunlight, in unopened original factory containers, at temperatures above 50°F (10°C) and below 100°F (38°C)

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 2.5 – 5.0 mils (64 – 125 µm)
- Ensure surface is dust free after blasting

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

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

Concrete / Masonry

- All surfaces must be sound, clean, free of oil, grease, dirt, mildew, curing compounds, loose and flaking paint, and other foreign substances
- Prepare in accordance with SSPC-SP13 guidelines to achieve a surface profile equivalent to CSP 3 to CSP 5 in accordance with ICRI 310.2R-2013
- Surface condition should be Saturated Surface Dry (SSD) or dryer

Non-ferrous metals

- Lightly abrasive blast with a fine abrasive in accordance with SSPC-SP16 guidelines to achieve a profile of 40 - 100 µm (1.5 - 4.0 mils)

Substrate temperature and application conditions

- Substrate temperature during application should be between 40°F (4°C) and 120°F (49°C)
- Substrate temperature during application and curing should be at least 5°F (3°C) above dew point
- Relative humidity during application should not exceed 85% (excluding concrete/masonry)

Note:

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- For best results in limiting outgassing, apply to prepared concrete when the substrate temperature is stable or falling

SYSTEM SPECIFICATION

- Recommended DFT for Steel (Atmospheric): 16-40 mils (0.4-1.0 mm)
- Recommended DFT for Steel (Immersion): 20-40 mils (0.5-1.0 mm)
- Recommended DFT for Non-Ferrous Metals: 8-18 mils (0.2-0.5 mm)
- Recommended DFT for Ductile Iron: 12-24 mils (0.3-0.6 mm)
- Recommended DFT for Concrete: 60-120 mils (1.5-3.1 mm)
- Primers for concrete (optional): PPG RAVEN® 175 Primer**, PPG RAVEN® 171FS Primer**, PPG RAVEN® 155 Primer**
- Primer for Carbon Steel and Concrete (optional): PPG AMERLOCK 2 and PPG AQUATAPOXY® 190 Primer

Note:

- **Penetrating primer for limiting outgassing on concrete

INSTRUCTIONS FOR USE

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

- Apply by airless spray, brush or roller application
- Mix Part A and Part B separately to ensure uniformity. Then, pour Part B into Part A container and thoroughly mix the two components of the kit together for 3 minutes with mechanical jiffy-type mixer
- Properly mixed material will be a uniform color without light or dark spots
- Mix thoroughly before application

Pot life

30 minutes at 72°F (22°C)

Note:

- Longer pot life is possible by mixing smaller amounts and cooling down the components before mixing

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Airless spray – Plural component

- Heated hoses are recommended
- 1 : 1 Heated Plural Component Spray
- See Application Guide for further set up information

Recommended thinner

No thinner should be added

Notes:

- Part B should be maintained at temperature range of 150-165°F (66-74°C)
- Part A should be 20°F (11°C) warmer than Part B during processing
- Part A should be maintained at temperature range of 135-145°F (57-63°C)

Trowel/brush

- A-6 Thick: brush or trowel application at 20 - 120 mils per coat; not recommended for roller application
- Be aware that multiple coats may be required to achieve uniform and sufficient film thickness to provide proper hiding performance when applying by brush or roller

Cleaning solvent

- MEK, acetone, or xylene
- THINNER 90-58 (AMERCOAT 12)

ADDITIONAL DATA

Physical data of cured material	
Characteristic	**Value**
Tensile Strength (ASTM D638)	>6,000 psi (>41 MPa)
Tensile Elongation (ASTM D638)	1.3%
Compressive Strength (ASTM D695)	>10,000 psi (>69 MPa)
Flexural Strength (ASTM D790)	>9,400 psi (65 MPa)
Hardness, Shore D (ASTM D2240)	87
Taber Abrasion (ASTM D4060, CS-17 Wheel, 1 kg load, 1,000 cycles)	<40 mg loss
Adhesion to Steel (ASTM D4541)	>2,000 psi (>14 MPa)
Adhesion to Concrete (ASTM D7234)	To substrate failure

Note:

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- The value ranges stated in this Product Data Sheet are based on system processing under laboratory conditions. Equipment configurations and/or field application conditions may produce variances in final system values.

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
20.0 mils (508 µm)	80 ft^2/US gal (2.0 m^2/l)
40.0 mils (1016 µm)	40 ft^2/US gal (1.0 m^2/l)
60.0 mils (1524 µm)	27 ft^2/US gal (0.7 m^2/l)
120.0 mils (3048 µm)	13 ft^2/US gal (0.3 m^2/l)

Product Qualifications

- AWWA C210-98
- Qualified for ANSI/NSF Standard 61 (potable water) for tanks and pipes
- Tank and Pipe Sizes for Potable Water: Tank >= 50 gallons CLD 23; Pipe 1' - 3" & >=6" CLD 23

DISCLAIMER

- 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 PPG representative for specific instructions and in order to make sure that the product performance can be safeguarded.
- For industrial or professional use only

SAFETY PRECAUTIONS

- 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.

WARRANTY

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LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.