DESCRIPTION

100% solids, 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
- 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	8.0 - 120.0 mils (200 - 3000 µm) per coat	
Theoretical spreading rate	201 ft²/US gal for 8.0 mils (4.9 m²/l for 200 μ m) 13 ft²/US gal for 120.0 mils (0.3 m²/l for 3000 μ m)	
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	3 days	

Notes:



- See ADDITIONAL DATA Spreading rate and film thickness
- If overcoat time is exceeded, abrade and clean surface before recoating
- Curing time reflects ready for service time
- The shelf life for each of the unmixed components (Part A and Part B) for this product is 12 months at 70°F (21°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

Substrate temperature and application conditions

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

Note:

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

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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: PPG AMERLOCK 2

Note:

**Penetrating primer for limiting outgassing

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

<u>Airless spray - Plural component</u>

- 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 A should be maintained at temperature range of 135-145°F (57-63°C)
- 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

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Brush/roller

- Use a medium bristle brush or a short-nap synthetic roller cover with a phenolic core
- Brush or roller application up to 12 mils per coat
- 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
- · Avoid excessive re-brushing or over-rolling

Recommended thinner

No thinner should be added

Cleaning solvent

· MEK, acetone, or xylene

Cleaning procedure

- Cured product may be disposed of without restriction
- . Excess component material (Part A and Part B) should be mixed together and disposed in a normal manner
- Product containers that are 'drip free' may be disposed according to local, state and federal laws

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:

- 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.

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Spreading rate and film thickness	
DFT	Theoretical spreading rate
8.0 mils (200 µm)	201 ft²/US gal (4.9 m²/l)
12.0 mils (304 µm)	134 ft²/US gal (3.3 m²/l)
16.0 mils (406 µm)	100 ft²/US gal (2.5 m²/l)
18.0 mils (457 μm)	89 ft²/US gal (2.2 m²/l)
20.0 mils (508 μm)	80 ft²/US gal (2.0 m²/l)
24.0 mils (609 μm)	67 ft²/US gal (1.6 m²/l)
40.0 mils (1016 μm)	40 ft²/US gal (1.0 m²/l)
60.0 mils (1524 μm)	27 ft²/US gal (0.7 m²/l)
120.0 mils (3048 μm)	13 ft²/US gal (0.3 m²/l)

Product Qualifications

- AWWA C210-98
- Qualified for ANSI/NSF Standard 61 (potable water) for tanks and pipes

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.

REFERENCES

• Information sheet | Explanation of product data sheets

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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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