

MEGASEAL™ HPU

(also branded as AMERSHIELD™ VOC)

DESCRIPTION

High performance urethane floor coating

PRINCIPAL CHARACTERISTICS

- Unique, high-solids, high build coating
- Outstanding weather resistance with excellent color and gloss retention
- Tough, flexible, and impact resistant
- Direct to metal and concrete in protected environments
- Compliant with California SCAQMD Rule 1113
- Recommended uses:
- Concrete walls and floors

COLOR AND GLOSS LEVEL

- Custom Colors
- Gloss

Notes:

- Certain colors, especially red, orange, and yellow may require additional coats for adequate hiding, especially if applied over primers with a significant color contrast
- Yellow, red, and orange colors will fade faster than other colors due to the replacement of lead-based pigments with lead free pigments in these colors

BASIC DATA AT 68°F (20°C)

Data for mixed product	
Number of components	Two
Volume solids	73 ± 2%
VOC (Supplied)	max. 0.7 lb/US gal (approx. 84 g/l)
Temperature resistance (Continuous)	To 200°F (93°C)
Temperature resistance (Intermittent)	To 250°F (121°C)
Recommended dry film thickness	3.0 - 5.0 mils (75 - 125 µm) depending on system
Theoretical spreading rate	234 ft ² /US gal for 5.0 mils (5.7 m ² /l for 125 µm)
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Notes:

- See ADDITIONAL DATA - Overcoating intervals
- See ADDITIONAL DATA - Curing time
- Color will drift at elevated temperatures
- Intermittent temperature resistance should be less than 5% of the time, and maximum 24 hours



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RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Coating performance is proportional to the degree of surface preparation. Refer to the application instructions for specific primers and intermediate coats for application and curing procedures. Ensure epoxies are free from amine blush prior to overcoating. All previous coats must dry and free of contaminants. Adhere to all minimum and maximum topcoat times for specific primers and intermediate coats. Aged epoxy coatings require abrading prior to applying the product. A test patch over unknown coatings is recommended.

Concrete

- See specific primer

Substrate temperature and application conditions

- Surface temperature should be at 40°F to 120°F (4.4°C to 49°C)
- With accelerator: Surface temperature during application should be between 32°F (0°C) and 100°F (38°C).
- The surface temperature must be at least 5°F (3°C) above dew point
- Ambient temperature during application and curing should be between 40 °F (4°C) and 120 °F (49 °C).
- With accelerator: Ambient temperature during application and curing should be between 32°F (0°C) and 100°F (38°C).
- Maximum 85% relative humidity during application and curing

SYSTEM SPECIFICATION

- Primer: MegaSeal TF
- Other PPG epoxy primers are also acceptable.

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 80:20 (4:1)

- Pre-mix base component with a pneumatic air mixer at moderate speeds to homogenize the container. Add hardener to base and agitate with a power mixer for 1–2 minutes until completely dispersed

Pot life

1 hour at 70°F (21°C)

Note: See ADDITIONAL DATA – Pot life

Application

- Ensure good ventilation during application and curing
- Provide shelter to prevent wind from affecting spray patterns

Material temperature

Material temperature during application should be between 40°F (4°C) and 90°F (32°C)



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Air spray

- A moisture and oil trap in the main line is essential. Product is sensitive to moisture contamination.
- Use standard conventional equipment

Recommended thinner

THINNER 21-85 (97-739 THINNER (exempt)), THINNER 21-06 (AMERCOAT 65 (xylene)), THINNER 21-25 (AMERCOAT 101 (recommended for > 90°F (32°C))), THINNER 60-12 (AMERCOAT 911)

Volume of thinner

0 - 20%

Nozzle orifice

Approx. 0.070 in (1.8 mm)

Airless spray

- 28:1 pump or larger
- Can be applied with plural component equipment

Recommended thinner

THINNER 21-85 (97-739 THINNER (exempt)), THINNER 21-06 (AMERCOAT 65 (xylene)), THINNER 21-25 (AMERCOAT 101 (recommended for > 90°F (32°C))), THINNER 60-12 (AMERCOAT 911)

Volume of thinner

0 - 10%

Nozzle orifice

0.013 – 0.015 in (approx. 0.33 – 0.38 mm)

Brush/roller

- Use a high quality natural bristle brush and/or solvent resistant, 1/4" or 3/8" nap roller. Ensure brush/roller is well loaded to avoid air entrainment. Multiple coats may be necessary to achieve adequate film-build
- AMERCOAT 851 flow control additive can be used to for enhanced flow and leveling with brush and roll application
- Use of AMERCOAT 851 additive at greater than 2.5 oz/gal will increase the VOC to > 100 g/L
- Ensure the brush/roller is well-loaded to avoid air entrainment. Level air bubbles with a brush. Multiple coats may be necessary to achieve adequate film build

Recommended thinner

PPG 97-739 (exempt), AMERCOAT 65 (xylene), AMERCOAT 101 (recommended for > 90°F (32°C)), AMERCOAT 911

Cleaning solvent

AMERCOAT 12, 12E, or 12V Cleaner, 97-739, AMERCOAT 911 or AMERCOAT 65 thinner (xylene)



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ADDITIONAL DATA

Overcoating interval for DFT up to 5.0 mils (125 µm)					
Overcoating with...	Interval	40°F (4°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	3 days	48 hours	8 hours	4 hours
	Maximum	7 days	7 days	4 days	12 hours

Overcoating interval for DFT up to 5.0 mils (125 µm)						
Overcoating with...	Interval	20°F (-7°C)	32°F (0°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself + AMERCOAT 866 M accelerator	Minimum	16 hours	8 hours	4 hours	2 hours	1.5 hours
	Maximum	4 days	48 hours	24 hours	12 hours	6 hours

Curing time for DFT up to 5.0 mils (125 µm)		
Substrate temperature	Dry to touch	Dry to handle
40°F (4°C)	8 hours	3 days
50°F (10°C)	4 hours	48 hours
70°F (21°C)	2.5 hours	10 hours
90°F (32°C)	1 hour	5 hours

Curing time when mixed with AMERCOAT 866 M for DFT up to 5.0 mils (125 µm)		
Substrate temperature	Dry to touch	Dry to handle
20°F (-7°C)	8 hours	16 hours
32°F (0°C)	4 hours	10 hours
50°F (10°C)	1.5 hours	6 hours
70°F (21°C)	40 minutes	3 hours
90°F (32°C)	20 minutes	2 hours

Pot life (at application viscosity)	
Mixed product temperature	Pot life
50°F (10°C)	5 hours
70°F (21°C)	2.5 hours
90°F (32°C)	1.5 hours

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Pot life (at application viscosity): with AMERCOAT 866 M accelerator

Mixed product temperature	Pot life
50°F (10°C)	2 hours
70°F (21°C)	1 hour
90°F (32°C)	30 minutes

Product Qualifications

- Compliant with USDA Incidental Food Contact Requirements

SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and 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

• CONVERSION TABLES	INFORMATION SHEET	1410
• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431

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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Product code	Description
99-1900	Clear Base
99-1901	White Base
99-1910	Pearl Gray Base
99-1991	Neutral Tint Base *
99-1993	Light Tint Base *
99-1995	Deep Tint Base *
99-1933	Hardener

Notes:

- Available in 1-gallon and 5-gallon kits. (1-gallon kits have 0.80 gallons of base and 0.20 gallons of hardener; 5-gallon kits have 4 gallons of base and 1 gallon of hardener).
- * Tintable using UCD V-Line colorants only

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