DESCRIPTION

One-component, int./ext. semi-gloss DTM industrial grade enamel

PRINCIPAL CHARACTERISTICS

- 100% waterborne acrylic enamel
- Excellent adhesion for true DTM performance
- Easy to apply
- Low odor during application
- Fast drying properties
- Flash rust resistant
- · Good abrasion, chemical, and corrosion resistance
- Mildew resistant
- · Washable, scrub resistant
- · Soap and water clean up

COLOR AND GLOSS LEVEL

- White and Pastel Base, Midtone Base, Neutral Base, Red Base, Yellow Base, Black
- Semi-gloss

Note:

- Certain colors, especially red, orange, and yellow may require additional coats for adequate hiding, especially if applied over primers with a significant color contrast

BASIC DATA AT 68°F (20°C)

Data for product				
Number of components	One			
Volume solids	40 ± 2%			
VOC (Supplied)	max. 0.4 lb/US gal (approx. 50 g/l)			
Temperature resistance (Continuous)	To 200°F (93°C)			
Temperature resistance (Intermittent)	To 250°F (121°C)			
Recommended dry film thickness	2.0 - 4.0 mils (50 - 100 μm) depending on system			
Theoretical spreading rate	320 ft²/US gal for 2.0 mils (7.9 m²/l for 50 μm)			
Shelf life	At least 36 months when stored cool and dry			

Notes:

- See ADDITIONAL DATA Overcoating intervals
- See ADDITIONAL DATA Curing time

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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.

Steel

- Remove all rust, dirt, moisture, grease or other contaminants from the surface in accordance with SSPC SP-1
- Power tool clean in accordance with SSPC SP-3 or hand tool clean to SSPC SP-2 requirements. Alternately, abrasive blast to SSPC SP-7 requirements. Abrasive blasting to SSPC SP-6 or better is also allowable and will give the best possible system performance
- When using as a DTM finish without a primer, a minimum of two coats is recommended for best corrosion resistance
- Note that a primer must be used on all bare metal substrates when using colors made from Midtone and Neutral bases

Non-ferrous metals and galvanizing

- Remove oil or soap film with detergent or emulsion cleaner as per SSPC SP-1 and galvanizing requirements, then use a phosphatizing conversion coating
- Alternately, power tool clean to uniformly abrade the surface or lightly abrasive blast with a fine abrasive to produce a uniform and dense anchor profile of 1.0 – 2.0 mils (25 – 50 μm) in accordance with SSPC SP-16.
- Galvanizing that has had at least 12 months of exterior weathering may be coated after power washing to remove all
 contaminants and white rust
- Galvanized surfaces that have been passivated with a chromate treatment must be abrasive blasted. Coatings may
 not adhere to chromate sealed galvanizing if the chromates are not completely removed.

Concrete / Masonry

- Clean concrete surface, abrasive blast per ASTM D4259 or acid-etch in accordance with ASTM D 4260
- Fill concrete voids with AMERCOAT 965 or AMERCOAT 114 A
- Clean masonry surfaces by ASTM D4261
- Fill masonry block with AMERLOCK 400 BF block filler or PPG 4-100 acrylic block filler

Wood

- Sand new bare wood to remove any surface contamination and surface cells
- Remove oil spots, sap or pitch by wiping with 97-737 thinner
- Properly dispose of solvent rags to avoid spontaneous combustion hazard
- A wood primer or a first coat of this product may be used to prime the surface
- To recoat primed wood, remove all dirt, grease, or oil with a cleaner. Rinse with clean water. Remove wax with a commercial de-waxer. Sand loose paint to a tight, adherent surface

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Dry wall

 Tape all joints, fill cracks and nail holes with patching, paste or spackle; sand smooth. Remove all dust. Unsealed drywall will require at least 2 coats of this product

Substrate temperature and application conditions

- Surface temperature during application should be between 40°F (4°C) and 120°F (49°C)
- Surface temperature during application should be at least 5°F (3°C) above dew point
- Ambient temperature should be between 40°F (5°C) and 100°F (37°C)
- Relative humidity in excess of 85% will slow curing

SYSTEM SPECIFICATION

- Primers for concrete, masonry, stucco, plaster: 4-603XI, 4-808, AMERLOCK Series (concrete)
- Primers for CMU: 4-100XI, AMERLOCK 400BF, 6-15XI
- Primers for ferrous metal: self priming, 90-1912 SERIES, METALHIDE® 2000, 6-208, 7-852, AMERLOCK® 2/400, DIMETCOTE® 9 SERIES
- Primers for non-ferrous metals: self priming, 90-1912 SERIES, 6-204, 6-208, 6-209
- Primers for drywall: 6-2, 9-900, 17-921XI
- Primers for Exterior Wood: 17-921XI

INSTRUCTIONS FOR USE

• Agitate with a power mixer for 1 - 2 minutes until completely dispersed. Ensure good off-bottom mixing

Application

- · Area should be sheltered from airborne particulates and pollutants
- Avoid combustion gases or other sources of carbon dioxide that may promote ambering of light colors
- · Ensure good ventilation during application and curing
- Provide shelter to prevent wind from affecting spray patterns
- · Avoid exterior painting late in the day or when dew or condensation are likely to form or if rain is expected

Material temperature

Material temperature during application should be between 50°F (10°C) and 90°F (32°C)

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Air spray

· Use standard conventional equipment

Recommended thinner

Tap water

Volume of thinner

0 - 5%

Nozzle orifice

Approx. 0.070 in (1.8 mm)

Nozzle pressure

0.3 - 0.5 MPa (approx. 4 - 5 bar; 50 - 70 p.s.i.)

Note:

- Overthinning may result in inadequate film thickness and subsequent pinpoint rusting

<u>Airless spray</u>

• 28:1 pump or larger

Recommended thinner

Tap water

Volume of thinner

0 - 5%

Nozzle orifice

0.013 - 0.017 in (approx. 0.33 - 0.43 mm)

Note:

- Overthinning may result in inadequate film thickness and subsequent pinpoint rusting

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Brush/roller

• Use a high quality polyester/nylon brush and/or a high quality 3/8" nap roller. In hot or dry conditions, layoff lightly rolling with 3/8" nap roller cover. Multiple coats may be required to achieve specified film thickness

Recommended thinner

Tap water

Volume of thinner

0 - 5%

Note:

- Overthinning may result in inadequate film thickness and subsequent pinpoint rusting

Cleaning solvent

· Soap and water

ADDITIONAL DATA

Overcoating interval for DFT up to 2.0 mils (51 µm)						
Overcoating with	Interval	40°F (4°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)	
itself	Minimum	1 hour	1 hour	45 minutes	30 minutes	
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	

Notes:

- Overcoating times valid for a relative humidity of 50%
- Drying times may vary depending on temperature, humidity, and air movement

Curing time for DFT up to 2.0 mils (50 µm)					
Substrate temperature	Dry to touch	Dry to handle			
40°F (4°C)	30 minutes	1 hour			
50°F (10°C)	30 minutes	1 hour			
70°F (21°C)	15 minutes	45 minutes			
90°F (32°C)	10 minutes	30 minutes			

Note:

- Curing times valid for a relative humidity of 50%

Product Qualifications



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- Meets MPI Category #153, Light Industrial Coating, Interior, Water Based, Semi-Gloss (MPI Gloss Level 5)
- Meets MPI Category #1534 X-Green[™], Light Industrial Coating, Interior, Water Based, Semi-Gloss (MPI Gloss Level
 5)
- Meets MPI Category #163, Light Industrial Coating, Exterior, Water Based, Semi-Gloss (MPI Gloss Level 5)

DISCLAIMER

This product is specifically suitable for use on the substrates mentioned in this document. For application on any
other substrates, please always contact your PMC representative for specific instructions and in order to make sure
that the product performance can be safeguarded.

SAFETY PRECAUTIONS

- · Read all label and Safety Data Sheet (SDS) information prior to use
- WARNING: Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain
 lead. EXPOSURE TO LEAD DUST OR FUMES MAY CAUSE ADVERSE HEALTH EFFECTS, ESPECIALLY IN CHILDREN
 OR PREGNANT WOMEN. Controlling exposure to lead or other hazardous substances requires the use of proper
 protective equipment, such as a properly fitted and approved (e.g., NIOSHapproved) respirator and proper
 containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at
 1-800-424-LEAD or the regional Health Canada office

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

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.

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.

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AVAILABILITY OF PACKAGING

Packaging

• 1-gallon and 5-gallon containers

Depending on specific country of application the following versions are available:

Product	Color
90-1610	White and Pastel Base
90-1620	Midtone Base*
90-1640	Neutral base*
90-1653	Black
90-1660	Red base
90-1680	Yellow base

Note:

- * Must be tinted

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