April 23, 2018 (Revision of December 27, 2016)

PITT-TECH® | 90-474 SERIES

DESCRIPTION

One-component, int./ext. satin DTM industrial enamel

PRINCIPAL CHARACTERISTICS

- Waterborne acrylic enamel
- Excellent adhesion for true DTM performance in pastel base ready-mixed colors
- Ease of application, brush, roll, or spray
- Low odor, soap and water clean up
- High hiding
- Flash rust resistant
- Washable, scrub resistant

COLOR AND GLOSS LEVEL

- White, black, safety colors, custom colors
- Satin (20 to 40 w/ 60° meter)

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	38 ± 3%
VOC (Supplied)	max. 1.9 lb/US gal (approx. 227 g/l)
Temperature resistance (Continuous)	To 200°F (93°C)
Temperature resistance (Intermittent)	To 250°F (121°C)
Recommended dry film thickness	2.0 - 3.0 mils (50 - 75 µm) depending on system
Theoretical spreading rate	305 ft^2/US gal for 2.0 mils (7.6 m^2/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
- Discoloration will occur at high temperatures

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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 specifc 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.
- Note that a primer must be used on all bare metal substrates when using colors made from Midtone, Deeptone, and Deep Rustic bases

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

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

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 50°F (10°C) and 120°F (49°C)
- Surface temperature during application should be at least 5°F (3°C) above dew point
- Ambient temperature during application and curing should be between 50°F (10°C) and 100°F (38°C)
- Relative humidity during application and curing should not exceed 85%

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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

SYSTEM SPECIFICATION

- Primers for concrete, masonry,stucco, plaster: 4-603, 4-808, AMERLOCK SERIES (concrete)
- Primers for CMU: 4-100, AMERLOCK 400BF, 6-15, 16-90
- Primers for ferrous metal: self priming, 90-712, METALHIDE 2000, 6-208, 7-852
- Primers for non-ferrous metals: self priming, 90-712, 6-204, 6-208, 6-209
- Primers for drywall: 6-2, 9-900, 17-921

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 60°F (16°C) and 90°F (32°C)

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

0.4 - 0.5 MPa (approx. 4 - 5 bar; 55 - 70 p.s.i.)

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Airless spray

- 28:1 pump or larger

Recommended thinner
Tap water

Volume of thinner
0 - 5%

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

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%

Cleaning solvent
Soap and water

ADDITIONAL DATA

Overcoating interval for DFT up to 2.0 mils (51 µm)				
Overcoating with...	**Interval**	**50°F (10°C)**	**70°F (21°C)**	**90°F (32°C)**
itself	Minimum Maximum	12 hours Unlimited	5 hours Unlimited	3 hours Unlimited

Curing time for DFT up to 2.0 mils (51 µm)		
Substrate temperature	**Dry to touch**	**Dry to handle**
50°F (10°C)	2.5 hours	12 hours
70°F (21°C)	70 minutes	5 hours
90°F (32°C)	40 minutes	3 hours

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Product Qualifications

- Compliant with USDA Incidental Food Contact Requirements
- Can help earn LEED 2009 credits
- Performance offset to Federal Standard TT-E-2784 and Mil-P-28578

DISCLAIMER

- For industrial or professional use only

SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets

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.

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

Packaging
1-gallon and 5-gallon kits

Product codes	Description
90-406	Safety Red
90-430	Safety Yellow
90-444	Bronze Tone
90-453	Black
90-474	White and Pastel Base
90-475	Midtone Base*
90-476	Deeptone Base*
90-477	Deep rustic base*

Notes:
- * Must be tinted
- Refer to the appropriate color formula book, automatic tinting equipment, and/or computer color matching system for color formulas and tinting instructions

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