

PITT-TECH® PLUS | 90-1310 SERIES

DESCRIPTION

One-component, int./ext gloss DTM Industrial enamel

PRINCIPAL CHARACTERISTICS

- 100% waterborne acrylic enamel
- Excellent adhesion for true DTM performance
- Easy to apply
- Low odor during application
- Soap and water clean up
- Improved color and gloss retention versus most alkyds and water based systems
- Flash rust resistant
- Washable, scrub resistant

COLOR AND GLOSS LEVEL

- White, black, safety colors, custom colors
- 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	41 ± 3%
VOC (Supplied)	max. 0.8 lb/US gal (approx. 90 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	329 ft ² /US gal for 2.0 mils (8.2 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
- Two coats are required for maximum protection and for applications where this product is used as a finish coat
- 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 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
- Note that a primer must be used on all bare metal substrates when using colors made from Midtone, Deeptone, and Deep Rustic 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

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



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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 during application and curing should be between 40°F (4°C) and 100°F (38°C)
- Relative humidity in excess of 85% will slow curing

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., NIOSH approved) 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, AMERLOCK 2/400, DIMETCOTE 9 SERIES
- Primers for non-ferrous metals: self priming, 90-712, 6-204, 6-208, 6-209
- Primers for drywall: 6-2, 9-900, 17-921
- Primers for Exterior Wood: 6-609, 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 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

Airless spray

- 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

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



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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	6 hours	1.5 hours	1 hour
	Maximum	Unlimited	Unlimited	Unlimited

Note: Overcoating times valid for a relative humidity of 50%

Curing time for DFT up to 2.0 mils (51 µm)		
Substrate temperature	Dry to touch	Dry to handle
50°F (10°C)	60 minutes	4 hours
70°F (21°C)	20 minutes	1 hour
90°F (32°C)	12 minutes	40 minutes

Note: Curing times valid for a relative humidity of 50%

Product Qualifications

- Compliant with USDA Incidental Food Contact Requirements
- Meets MPI Category #154, Interior W.B. Light Industrial Coating
- Meets MPI Category #164, Light Industrial Coating, Exterior W. B. Coating, Gloss, MPI Gloss Level 6
- Can help earn LEED 2009 credits
- Performance offset to Federal Standard TT-E-2784 and Mil-P-28578
- Meets the weathering test requirements of SSPC PS 24.00 6.4.1

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.



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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

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LIMITATIONS OF LIABILITY

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AVAILABILITY

Packaging

1-gallon and 5-gallon kits

Product codes	Description
90-1306	Safety Red
90-1313	Safety Orange
90-1333	Safety Yellow
90-1353	Gloss black
90-1310	White and Pastel Base
90-1320	Midtone Base*
90-1330	Deeptone Base*
90-1340	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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