



274 – SERIES ENAMELS DTM ALKYD ACRYLIC

PRODUCT DESCRIPTION

274-SERIES DTM ENAMELS are durable, gloss synthetic coatings for interior and exterior protection of steel and aluminum. They have been specifically developed for protection and decoration of metal exposed to industrial and highly humid environments. These enamels will provide a corrosive resistant coating for maintenance and machinery painting, as well as for use on heavy capital structures where long-term paint life is expected.

274-SERIES DTM ENAMELS can be used on production lines where fast air dry is needed. They may be applied direct-to-metal, or over a suitable primer for even greater protection.

274-SERIES DTM ENAMELS are recommended for the following, to name a few:

Trailers	Farm Equipment	Bins
Benches	Construction Equipment	Hoists
Drums	Ventilation Systems	Mills
Elevators	Waste Containers	Pipe
Fire Doors	Steel Door Frames	Racks
Lift Trucks	Sprinkler Systems	Tanks
Hand Trucks	Metal Furniture	Motors
Conveyors	Machinery	

PERFORMANCE PROPERTIES

System Tested:

Substrate: Steel
Surface Preparation: SSPC-SP6
1 ct. Universal Primer @ 3 mils dft
1 ct. 484-Series Enamel @ 2 mils dft

Adhesion:

Method: ASTM D4541 Type II
Result: 7-day cure: Passes 250 lbs/sq in

Pencil Hardness:

Method: ASTM D3363
Result: 7-day cure: 3B

Direct Impact Resistance:

Method: ASTM G14
Result: 24-hour cure: Passes 90 lbs/sq in
7-day cure: Passes 30 lbs/sq in

Flexibility:

Method: ASTM D522
Result: 24-hour cure: Passes 1/8" bend
7-day cure: Passes 1/8" bend

Humidity Resistance:

Method: ASTM D4585
Result: Passes 120 hours @ 100°F

Dry Heat Resistance:

Method: ASTM D2485 Method A
Result: Passes 200°F

Salt Spray Resistance:

Method: ASTM B117
Result: Passes 500 hours

Thermal Shock:

Method: ASTM D2246 – 5 cycles
Result: Passes

TECHNICAL INFORMATION

*The following information is based on white (274W4520).
Colors may vary slightly.*

Gloss: 90+ units @ 60° Maximum

Use: Protective / Decorative

Color: White, Black and Custom Colors

Recommended Film Thickness: 1.0 – 2.0 Mils Dry
2.9 – 5.8 Mils Wet

Spread Rate: 523 – 276 sq ft/gal
@ Recommended Dry Film – No Loss

Dry Time: @ 3.0 Mils Wet
@ 77°F (25°C) & 50% Relative Humidity

To Touch: 15 minutes

Tack Free: 45 minutes

To Recoat: Overnight or 8 hours

Drying times are dependent upon film thickness, temperature and humidity.

Flash Point: 45°F (7°C) SETAFLASH

Viscosity: 30" – 35" #2 Zahn @ 77°F (25°C)

VOC: 4.65 lbs/gal (558 g/l)

#HAPS / Gal Solids: 2.369

Solids by Volume: 34.47 ± 2%

Solids by Weight: 50.98 ± 2%

Weight per Gallon: 9.49 lbs

Shelf Life: Two years unopened from date of manufacture.

Reducer: 560X3504 (Xylene)

Clean Up: 560X0952 (Wash Solvent),
560X3504 (Xylene)

APPLICATION INFORMATION

SURFACE PREPARATION:

Surface of substrate should be dry, clean, and in sound, paint worthy condition. The surface must be free of dirt, grease, oil, salts, loose rust, loose mill scale, and any other foreign materials or contaminants.

Steel and Iron:

The minimum surface preparation for steel and iron is Hand Tool Cleaning per SSPC-SP2. Power Tool Cleaning per SSPC-SP3 is preferred for better performance. Prior to either procedure, the surface should be solvent cleaned per SSPC-SP1. For even better performance, begin with SSPC-SP1 followed by SSPC-SP6, Commercial Blast Cleaning. Bare metal should be primed as soon after surface preparation as possible, or before flash rusting occurs.

APPLICATION CONDITIONS:

Temperature:

Temperature should not exceed 120°F or go below 40°F during application. This applies to air, surface of substrate and the primer itself. The temperature should be at least 5° F above the dew point.

Relative Humidity:

Dry times may be adversely affected as the relative humidity increases. Caution should be taken when painting in very humid conditions.

MIXING & THINNING INSTRUCTIONS:

Before use, mix paint thoroughly by boxing and stirring. Mechanical agitation is preferred. Be sure all settlement, if any, is well incorporated. Thinning of this product is not normally required; however, if it is deemed necessary, use 560X3504 (Xylene) not to exceed 10% by volume.

Note: The addition of thinner reduces viscosity, which, in turn, affects spread rate and application characteristics. If thinner is used, make sure it is well incorporated into the paint prior to application.

This product is available in one-gallon and five-gallon containers. Other units of measure are available upon request.

Prices may be obtained from your Sumter Coatings Sales Representative, or by calling Sumter Coatings Customer Service at 1-888-471-3400.

APPLICATION EQUIPMENT:

The following are general recommendations. Pressure and tip size may be varied due to temperature changes and for proper spray characteristics.

Thinner: Typically not recommended. If deemed necessary, use 560X3504 (Xylene) not to exceed 10% by volume, or use 560X1522 (Exempt Reducer) to maintain HAPS compliancy.

See Mixing and Thinning Instructions for further information.

Airless Spray:

Hose: 1/4" or 3/8"
Tip Size: .015 – .019
Pressure: 1800 – 3000 psi
Filter: 60 Mesh

Air-assisted Airless

Pump Ratio: 15:1 – 30:1
Fluid Pressure: 800 – 1200 psi
Air Pressure: 5 – 20 psi
Fluid Hose: 1/4" – 3/8"
Tip Size: .015 – .019

Conventional Spray:

Gun: Graco AirPro or equal
Fluid Nozzle: 1.4 mm
Air Cap: 289773
Atomization Pressure: 40 – 50 psi
Fluid Pressure: 15 – 20 psi

HINTS FOR BETTER PERFORMANCE:

A clean substrate is necessary for optimal performance of the primer, as direct contact of primer and steel surface is required for rust inhibition and good adhesion.

All welds, sharp edges, angles, and other areas prone to early rusting due to insufficient coverage should be stripe-coated prior to full application in order to help prevent premature failure in these areas.

Over-thinning of the coating material can result in an insufficient film-build, poor adhesion and overall poor appearance.

During the spray application, use a 50% overlap with each pass of the gun. This will help ensure complete and thorough coverage, avoiding low build areas, which may corrode prematurely due to insufficient primer.

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The technical data furnished are true and accurate to the best of our knowledge at the date of issuance. It is subject to change without prior notice. It is suggested the user verify with Sumter Coatings, Inc. prior to specifying or ordering. Test results are believed to be reliable; however, no guarantee of accuracy is given or implied. We guarantee all products to conform to Sumter Coatings, Inc.'s quality control standards. Liability, if any, is limited to replacement of product. No other warranty or guarantee of any kind, expressed or implied, is made by Sumter Coatings, Inc., including fitness for a particular purpose.