

TECHNICAL DATA

Product Description

Finium DTM-AT uses advanced, self-linking acrylic technology to create a revolutionary, direct-to-metal, gloss finish. Formulated with an innovative curing mechanism providing early moisture resistance, tenacious adhesion and superior corrosion protection, Finium is a resilient shield against costly deterioration even in the most extreme conditions. The exceptional gloss and color retention of Finium minimizes maintenance costs, while enhancing the appearance of the substrate. Carefully formulated as an environmentally preferred product compared to traditional solvent-borne and high-performance waterborne coatings, Finium exceeds today's requirements for sustainable coatings.

Physical Properties

Resin Type	Advanced Self Cross-Linking 100% Acrylic
Finish/Sheen	Gloss 70 - 80 @ 60°
Colors	MH-1660 White
Bases	MH-1661 White Base, MH-1663 Deep Base, MH-0664 Neutral Base Tintable in "ACS".
Solids By Weight	48%
Solids by Volume	40%
Theoretical Coverage**	634 ft ² /gal @ 1 mil
Dry Film Thickness / Coat	2 – 3 mils (50 - 75 microns)
Wet Film to Achieve DFT	5 – 7.5 mils (125 - 187.5 microns)
Coverage at DFT**	211 – 317 ft ² /gal
VOC's (White)	.79 - .83 lbs./gal. (95 - 100 grams/liter)
Thinning	DO NOT THIN
Clean-up Solvents	Water
Drying Time* (hours) At 70°F (21°C) _{[ASTM D1640] - 83 Reapproved 1989}	Set to Touch: ½ to 2 hours Recoat: 2 - 4 hours

* Dry times vary with surface temperature, air movement, humidity and film thickness.

** Coverage rates are estimates based on the products volume solids and make no allowance for material loss during application. Actual spread rates may vary dependent on applicator experience, surface porosity and texture.

Qualifications

Suitable for use in USDA inspected facilities
LEED Compliant: CIV 2.0, NC 2.2, CS 2.0
VOC Compliant: OCT, CARB, SCAQMD

Intended Uses

Apply to:

- Interior or exterior surfaces
- Ferrous Metal
- Galvanized Metal
- Aluminum
- Masonry surfaces
- Zinc Rich Products
- Composites

Protects:

- Tanks
- Equipment
- Conveyors
- Food processing plants
- Grain handling facilities
- Power generating plants
- Structural or support steel

The above are general recommendations and not intended to limit the use of Finium DTM-AT. Test areas are always recommended to confirm results. NOT INTENDED FOR IMMERSION SERVICE.

Performance Characteristics

Finium will meet or exceed the following performance testing criteria.

Test Name	Test Method	Results
Abrasion Resistance	ASTM D 4060, CS-17 Wheel 1kg Load, 1000 Cycles	123 mg loss
Cyclic Weathering	ASTM D-5894 4,000 hours	no blistering, face rust rated 9, 8-9 mm scribe creepage
Impact Resistance	ASTM 2794	Direct 160 in/lbs.
Heat Resistance	ASTM D 2485 High Temperature Service	Passes at 250° F (121° C)
Pencil Hardness	ASTM D 3363	B
Corrosion Resistance	ASTM B 117-94 Salt Spray (Fog) Test 168 hours	no face blistering, no face rust, 1 mm scribe creepage

Recommended Primers, Fillers and Sealers

Ferrous Metal	Finium DTM-AT Semi-Gloss Versacryl 200 Acrylic Maintenance Primer Cote-All Universal Primer Iron Prime 600 Quick Dry Universal Primer
Galvanized & Aluminum Metal	Finium DTM-AT Semi-Gloss Versacryl 200 Acrylic Maintenance Primer
Interior Wood	DU-1508 Latex Enamel Undercoat CU-1401 Alkyd Enamel Undercoat
Drywall Plaster	DU-1514 Apex Primer/Sealer CU-1401 Alkyd Enamel Undercoat DU-1502 Latex Primer/Sealer
Interior Concrete Block (wet environment)	BF-1501 Permafil Block Filler Versa Poxy 100 Acrylic Epoxy Block Filler
Interior Concrete Block (dry environment)	Finium DTM-AT S/G or Gloss (self priming) BF-1515 Acrylic Block Filler
Poured Concrete	Finium DTM-AT S/G or Gloss (self-priming) BU-1501 Sure Grip Primer

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Surface Preparation

All surfaces must be clean, sound, dry and free of all dirt, dust, wax, oil, grease, chalk and any other contamination that would interfere with new coating adhesion. Bare surfaces must be properly prepared. See "Recommended Primers, Fillers and Sealers" for appropriate primer to use depending on the substrate.

Masonry Surfaces: (Poured Concrete, Concrete Block)

New concrete must cure for a minimum of 30 days at 72° F (22° C) prior to coating application. Level all surface projections and mortar spatters by stoning. Rake mortar joints clean and remove all soluble salts. Finium is self-priming on masonry surfaces, however, see "Recommended Primers, Fillers and Sealers" for primer recommendations for interior and exterior masonry surfaces in dry and wet areas.

Ferrous Metal Surfaces:

Abrasive blast new steel to SSPC-SP-6. Use proper abrasive to achieve an average of 1.5 to 2 mil profile. Blasted surfaces should be primed before flash rusting occurs. If blasting is not practical, remove loose rust and mill scale with hand or power abrading tools as per SSPC-SP-2 and SSPC-SP 3.

New Galvanized & Aluminum Surfaces:

Remove surface contamination or passivators by scrubbing with a cleaning & etching solution or blast per SSPC-SP-7 brush-off blast.

Weathered Galvanized & Aluminum Surfaces:

Power or hand wash with detergent and rinse thoroughly. The surface must be dull and have a profile. Use a cleaning & etching solution if needed or blast per SSPC-SP-7 brush-off blast.

Wood Surfaces:

Sand smooth any exposed wood surfaces. Patch nail holes and any imperfections with wood filler or putty and sand smooth. Remove sanding dust. For bleeding type woods such as cedar or redwood use a stain blocking type primer

Plaster Surfaces:

New plaster must cure for a *minimum* of 30 days at 72° F (22° C) prior to coating application. Sand, fill cracks with spackling compound, allow to dry and sand smooth. Remove dust.

Drywall Surfaces:

Fill nail holes and imperfections with spackling compound and allow to dry. Sand tape joints and spackled areas and remove dust.

Previously Painted Metal Surfaces:

Power or hand washing is recommended to remove contamination. If oil or grease is present, use of a cleaner/degreaser is required. All cleaning residue must be completely rinsed from the surface. Allow to dry. Remove all loose coatings, rust and corrosion by scraping, sanding or other abrading method as per SSPC-SP-2 and SSPC-SP-3, or abrasive blast as per SSPC-SP-6 commercial blast. Use sandpaper to dull slick, glossy and/or non-porous surfaces with sandpaper.

Mildew:

Remove by using a solution of one part household bleach and three parts water. Apply to mildewed area and scrub. Allow solution to remain on the surface for 3 to 5 minutes and then rinse completely and allow to dry before coating application.

Application

Stir material prior to application. Intermix tinted containers to ensure color uniformity of all material. Protect product from freezing prior to and during application. Minimum surface and air temperature required for application is 50° F (10° C) and at least 5° F (3° C) above the dew point. Curing is affected by temperature, humidity and air movement. The minimums must be maintained for at least eight (8) hours in order to achieve proper film formation. Application at elevated temperatures, wind conditions, and/or low humidity may require special application procedures to achieve proper film formation. When Finium is used as a rust-inhibitive primer on blasted or pitted steel, sufficient material must be applied to completely cover surface profile. Abrasive blasted steel with blast profile of 1.5 - 2.0 mils, should have a minimum of 2 coats of primer at 2 - 3 mils per coat.

Brush or Roller:

A good quality synthetic brush will make application easier. Select a roller cover suited for the texture of the surface to be coated. Apply product in full even coats. Maintain a wet edge. To insure adequate film build, two coats are recommended when applying by brush or roller (see the drying times chart for recoat period).

Airless Spray:

Flush airless lines with water. Equipment must be clean prior to start. Apply the product in even coats and maintain a wet edge. Use multiple passes to achieve film build. Allow the product to dry between coats.

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.011" to 0.017"	2800 - 3000 PSI	1/4" - 3/8"	60 mesh

Safety Precautions

Paint Products contain chemical ingredients, which are considered hazardous. Prior to use, read container label warnings and the current Material Safety Data Sheet for important health and safety information. Insure these instructions are practiced during product application and cure. **Keep out of the reach of children.**

Limited Warranty

The technical data and suggestions for use contained in this document are true and correct to the best of our knowledge at the date of issuance. The statements of this document do not constitute a warranty, expressed or implied, as to the performance of these products. Since Diamond Vogel Paints does not control the application of its products, or the condition of the surfaces to which they are applied, Diamond Vogel Paint's liability will under no circumstances exceed replacement of the product. **All technical information is subject to change without notice.**