

TECHNICAL DATA

Product Description

Vers-Acryl 300 Acrylic DTM Primer/Finish Flat uses the latest in waterborne technologies to provide long-term color retention while protecting the substrate from corrosion. It is intended for architectural, industrial, and industrial maintenance projects in mild or moderate environments. This flat finish is designed as a finish coat that can be applied directly to both ferrous and galvanized metal, often referred to as a DTM, but can also be used as a primer under other finish systems over a variety of substrates.

Intended Uses

Apply to:

- Interior or exterior surfaces
- Galvanized metal
- Masonry surfaces
- Composites
- Ferrous metal
- Aluminum
- Zinc rich products

Protects:

- Tanks
- Equipment
- Material handling facilities
- Structural or support steel
- Processing plants
- Conveyors
- Power generating plants

The above are general recommendations and not intended to limit the use of Vers-Acryl 300. Test areas are always recommended to confirm results. NOT INTENDED FOR IMMERSION SERVICE.

Physical Properties

Resin Type	100% Acrylic Latex
Finish/Sheen	Flat, 5 ± 2 @ 60°
Bases	Tintable White Base MC-1555, Deep Base MC-1553 Tintable in "ACS"
Solids by Weight	50%
Solids by Volume	36%
Theoretical Coverage*	577 ft. ² /gal @ 1 mil
Dry Film Thickness / Coat	2.0–3.0 mils (50–75 microns)
Wet Film to Achieve DFT	5.7–8.3 mils (142.5–207.5 microns)
Coverage at DFT*	192–289 ft. ² /gal
VOCs	<100 grams/liter
Thinning	DO NOT THIN
Clean-up Solvents	Water
Drying Time**	Set to Touch: 30 minutes to 2 hours at 70°F (21°C) and 50% Relative Humidity Recoat: 2–4 hours at 70°F (21°C) and 50% Relative Humidity
ASTM D1640 - 83 Reapproved 1989	

* 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.

** Dry times vary with surface temperature, air movement, humidity and film thickness. Hot surface temperatures can cause overspray to fuse to an adjacent substrate. Remove overspray from hot surfaces immediately!

Performance Characteristics

Vers-Acryl 300 meets or exceeds the following performance testing criteria:

Test Name	Test Method	Results
Cyclic Weathering	ASTM D-5894 – 1,008 hours	Blistering #8F, face rust 9P, 1.5–2.5 mm scribe creepage
Adhesion Testing	ASTM D-3359 B	5B
Mandrel Bend/Flexibility	ASTM D-522	Passes

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Qualifications

LEED Compliant: LEED-2009
 VOC Compliant: AIM, OTC

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 "System Selector" 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. Vers-Acryl 300 is self-priming on masonry surfaces, however, see "System Selector" for primer recommendations for a variety of surfaces.

Ferrous Metal Surfaces: Abrasive blast new steel to SSPC-SP-6, Commercial Blast Cleaning. Use proper abrasive to achieve an average of 1.5 to 2.0 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, Hand Tool Cleaning and SSPC-SP 3, Power Tool Cleaning. Treat rust free, cold rolled steel with a metal cleaning and etching solution.

New Galvanized & Aluminum Surfaces: Remove surface contamination or passivators by scrubbing with a cleaning and etching solution or blast per SSPC-SP-7 Brush-Off Blast Cleaning.

Test Name	Test Method	Results
Abrasion Resistance	ASTM D 4060, CS-17 Wheel 1kg Load, 1000 Cycles	No more than 165 mg loss.
Cyclic Weathering	ASTM G 85 Annex A5 2,000 hours	No face blistering, no rusting, 3–6 mm scribe creepage.
Corrosion Resistance	ASTM B 117-94 Salt Spray (Fog) Test 2000 hours	No face blistering, no face rusting, 1–2 mm scribe creepage.

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 and etching solution if needed or blast per SSPC-SP-7, Brush-Off Blast Cleaning.

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, Hand Tool Cleaning and SSPC-SP-3, Power Tool Cleaning or abrasive blast as per SSPC-SP-6, Commercial Blast Cleaning. 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. Do not add ammonia to the bleach/water solution.

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. Temperature, humidity and air movement affect curing. 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 Vers-Acryl 300 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 to 2.0 mils should have a minimum of two (2) coats of primer at 2.0 to 3.0 mils DFT 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 ensure 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	Material Hose ID	Manifold Filter
0.015" to 0.017"	2800–3000 PSI	1/4" or 3/8"	60 mesh

TECHNICAL DATA**Packaging****Shipping Weight**

Product	1 Gallon	5 Gallon	Product	1 Gallon	5 Gallon
Vers-Acryl 300	1 Gallon Pail	5 Gallon Pail	Vers-Acryl 300	10.8 lbs. (4.9 kg)	54.0 lbs. (24.49 kg)

Safety Precautions

***WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

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

Safety Data

“Safety Data Sheets” are available from your Diamond Vogel representative or the Diamond Vogel website at www.diamondvogel.com. Prior to use of this product, obtain and review the Safety Data Sheet for health and safety information. Read and observe all precautionary notices on container labels.

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 does not control the application of its products, or the condition of the surfaces to which they are applied, Diamond Vogel’s liability will under no circumstances exceed replacement of the product. **All technical information is subject to change without notice.**

Additional Information

Cautions and Warnings information is located on the back panel of each product label.