



Heavy Duty Protective Coatings

LF-Series  
**V-Tech 500**  
*Hi-Build Epoxy Primer*



**Technical Data**

**PRODUCT DESCRIPTION**

A heavy industrial grade, 2 component, hi-build epoxy primer formulated to have excellent chemical and abrasion resistance. Exhibits excellent corrosion resistance and adhesion over properly prepared steel, galvanized metal and various other metal substrates. Surface tolerant over tightly adhered rust and most tightly adhered existing coatings. VOC compliant.

**INTENDED USES**

Designed to be used as an interior/exterior primer for structural steel, steel storage tanks and equipment in heavy duty, industrial maintenance environments. V-tech 500 may be used as an intermediate coat over organic zinc, inorganic zinc and catalyzed epoxy primers. Suitable for fresh water immersion. **Contact Diamond Vogel Technical Service for detailed information on immersion application.**

**PHYSICAL PROPERTIES**

<b>Color (Part A)</b>	Gray LF-0250, White LF-1250, Red LF-5252									
	<b>* Epoxies will chalk and fade with extended exposure to sunlight. Yellowing is a normal occurrence. The use of heaters that emit carbon dioxide and carbon monoxide during application may cause excessive yellowing to occur.</b>									
<b>Cure (Part B)</b>	LM-0222									
<b>Finish/Sheen</b>	30 - 40 @ 60°									
<b>Resin Type</b>	2 Component Epoxy									
<b>Clean-up Solvents</b>	Diamond Vogel N-4006 MEK									
<b>Solids by Weight</b>	76%									
<b>Solids by Volume</b>	60%									
<b>Theoretical Coverage</b>	962 ft <sup>2</sup> /gal @ 1 mil									
<b>Dry Film Thickness / Coat</b>	4-6 mils (100-150 microns)									
<b>Wet Film to Achieve DFT</b>	7-10 mils (175-250 microns)									
<b>Coverage at DFT</b>	160-240 ft <sup>2</sup> /gal @ 4-6 mils DFT									
<b>VOC</b>	2.81 lbs./gal. (336 - 337 grams/liter) activated									
<b>Induction time</b>	None									
<b>Mixing ratio (by volume)</b>	1 part resin to 1 part cure									
<b>Thinning</b>	DO NOT THIN									
<b>**Pot life [At 70°F (21°C)]</b>	7 hours									
<b>Drying Time (hours)</b>	<table border="0"> <tr> <td></td> <td><u>At 70°F (21°C)</u></td> <td><u>At 32°F (0°C)</u></td> </tr> <tr> <td>[ASTM D1640] - 83 Reapproved 1989</td> <td><u>Set to Touch</u></td> <td><u>1 hour</u>      <u>1½ hours</u></td> </tr> <tr> <td></td> <td><u>Dry Through</u></td> <td><u>5 ½ hours</u>      <u>24 hours</u></td> </tr> </table>		<u>At 70°F (21°C)</u>	<u>At 32°F (0°C)</u>	[ASTM D1640] - 83 Reapproved 1989	<u>Set to Touch</u>	<u>1 hour</u> <u>1½ hours</u>		<u>Dry Through</u>	<u>5 ½ hours</u> <u>24 hours</u>
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\* Dry times vary with surface temperature, air movement, humidity and film thickness.

\*\* Extreme temperatures can dramatically shorten Pot life.

**RECOAT/TOPCOAT**

<b>Recoat Time*</b>	<b>Product</b>	<b>Minimum Recoat</b>	<b>Maximum Recoat</b>
[At 70°F (21°C)]	V-Tech 500/V-Tech 500	1½ - 2 hours	2 months
	V-Tech 500/Mult-E-Poxy 180	1½ - 2 hours	6 months
	V-Tech 500/Pinnacle 330HS	1½ - 2 hours	2 months
	V-Tech 500/Pinnacle 460	1½ - 2 hours	1 month
	V-Tech 500/V-Cote 200	1½ - 2 hours	2 months
	V-Tech 500/V-Cote 222	1½ - 2 hours	2 months

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

**RECOMMENDED TOPCOATS**

- V-Tech 500 Hi-Build Epoxy
- Mult-E-Poxy 180 Epoxy Mastic
- Pinnacle 330HS High Solids Acrylic Polyurethane
- Pinnacle 460 Polyurethane
- V-Cote 200 Acrylic Maintenance Primer/Finish
- V-Cote 222 Acrylic Maintenance Semi-gloss Finish

## *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 prior to application of this product.

### **Ferrous Metal and Previously Painted Metal Surfaces:**

Power or hand washing is recommended to remove contamination prior to sandblasting. 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. For new steel and complete removal of old coating on previously coated steel, abrasive blast according to SSPC-SP-6 commercial Blast. Use proper abrasive to achieve an average of 1.5 to 2 mil profile. Blasted surfaces should be primed before flash rusting occurs. Treat rust free, cold rolled steel with a metal cleaning and etching solution.

### **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.

### **New Galvanized & Aluminum Surfaces**

Solvent wipe to remove surface contamination, then use 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.

### **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*

Part A (resin) and part B (cure) are packaged in pre-measured kits. The mixing ratio is 1 part A to 1 part B. Stir both components prior to intermixing. Thoroughly mix Part B into Part A using an explosion-proof power drill and Jiffler Mixer to disperse pigments. The material must be applied within the estimated pot life. For optimum application, air and surface temperatures should be from 50° to 90°F (10° to 32°C) and at least 5° F (3° C) above the dew point. Above 122°F (50°C), sagging may occur.

### **Airless Spray:**

Flush airless lines with Diamond Vogel N-4006 MEK. Equipment must be clean prior to start. Recommended airless spray pump size of one gallon per minute as a minimum. Apply a wet coat in even, parallel passes with 50 % overlap to avoid bare areas and pinholes. If required, cross spray at right angles.

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

## *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.**