

## HIGH PERFORMANCE

## TECHNICAL DATA

### Product Description

A fast dry, zinc rich vinyl resin coating that is suitable as a first coat over properly prepared steel substrates. Vinyl Zinc Rich coatings offer a smooth, tough film with excellent flexibility and impact resistance.

### Intended Uses

For applications specifically specifying VZ-108d Vinyl Zinc Rich. Intended for Immersion Service.

### Physical Properties

Resin Type		Vinyl
Finishes/Sheens		1-5° @ 60°
Colors		Red
Solids by Weight		56%
Solids by Volume		19%
Theoretical Coverage*		304 ft <sup>2</sup> /gal @ 1 mil
Dry Film Thickness / Coat		2.5 mils (63 microns) ± 0.25 mils (6.25 microns)
Wet Film to Achieve DFT		13.0–14.0 mils (325–350 microns) ± 0.25 mils (6.25 microns)
Coverage at DFT*		90 ft. <sup>2</sup> /gal
VOCs		5.4 lbs./gal (648 grams/liter)
Reduction Solvents		Below 50° F (10° C)
For these temperature ranges	Below 50° F (10° C)	MEK, Diamond Vogel N-4006
	Above 50°–70° F (10°–21° C)	MIBK, Diamond Vogel N-4003
	Above 70° (21° C)	MIAC, Diamond Vogel N-4007
Drying Time**		<b>Set to Touch:</b> 5–7 minutes
70° F (21° C) and 50% Relative Humidity		<b>Tack Free:</b> 20–25 minutes
ASTM D1640-83 reapproved 1989		<b>Through:</b> 2–3 hours
		<b>Immersion:</b> After 3 days

\* 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.

### Qualifications

VZ-108d meets performance and composition based on the Corps of Engineers Specification.

### 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 Surfaces:** An abrasive blast according to SSPC-SP-6/NACE No. 3, Commercial Blast Cleaning for non-severe environments. Areas where high moisture, vapors, and/or chemical fumes are present, abrasive blast according to SSPC-SP-10/NACE No. 2, Near White Blast.

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### Application

The Vinyl Zinc-Rich Primer is a 3-component vinyl coating that must be field mixed. It is packaged as a 5-gallon kit consisting of 4.5 gallons of base paint (Component A), 27.5 pounds of zinc dust (Component C) packaged in a 1-gallon pail, and a 3-ounce bottle of Silane (Component B) placed on top of the zinc dust in the gallon pail. To prepare the primer for application, add the Silane to the base paint and mix thoroughly. Sift the zinc dust into the base paint while it is being vigorously agitated with a power driven mixer, and continue mixing until the zinc dust has been well dispersed, and the mixture is smooth. The mixed paint shall, at some point be strained through a 30 – 60 mesh screen to prevent un-dispersed zinc dust slugs from reaching the spray gun nozzle. After mixing, the paint shall be covered at all times to avoid contamination and shall be applied within 8 days after it is mixed. When the ambient and/or steel temperature is below about 80° F, the paint will not normally require thinning; however, the paint shall at all times contain sufficient volatiles (thinners) to permit it to be satisfactorily atomized to provide a wet spray and to avoid deposition of particles that are semi-dry when they reach the surface. Where thinning is required, please refer to the first page of this document, under “Physical Properties”, referencing “Reduction Solvents”. The paint shall be stirred continuously during application at a rate that will prevent the zinc dust from settling. When spraying is resumed after any interruptions of longer than 15 minutes, the entire length of the material hose shall be whipped vigorously until any settled zinc is re-dispersed. Long periods of permitting the paint to remain stagnant in the hose shall be avoided by emptying the hoses whenever the painting operation is to be suspended for more than 1 hour. The material delivery hoses shall be kept as short as practicable, preferably not more than 50 feet in length. Equipment used for spraying this zinc primer shall not be used for spraying other vinyl type products without first being thoroughly cleaned, since many of the other products will not tolerate zinc contamination; no type of hot spray shall be used. An average dry film thickness of up to 2.5 mils may be applied in one double-spray coat. Unless specifically authorized, not more than 8 days shall elapse after application of the VZ-108d zinc rich coat before it receives a succeeding coat.

**Spray:** Flush airless lines with Diamond Vogel N-4003, MIBK. Equipment must be clean prior to start. Apply by spray application only. Conventional air spray, airless equipment or air assist airless is suitable. Airless pumps maintaining one gallon per minute at 2400 PSI is required. Apply a wet coat in even, parallel passes with 50% overlap to avoid bare areas and pinholes, crosshatch spray at right angles to the previous coat. Conventional spray, Binks 18 gun, 66 or 63C Fluid Tip, 63PB Air Cap or equivalent.

Tip Orifice	Atomizing Pressure	Material Hose ID	Manifold Filter
0.013" to 0.017"	2500PSI	1/4"	60 mesh

None of the above recommendations supersedes the Corp of Engineers specifications.

### Packaging

### Shipping Weight

Product	5 Gallon	5 Gallon
VZ-108d Vinyl Zinc Rich (pt. A)	4.5 Gallons in 5 gallon pail	57.5 lbs. (26.8 kg)
VZ-108d Silane (pt. B)	3 fluid oz. (packed in pt. C, Zinc Dust)	0.5 lbs. (226.8 g)
VZ-108d Zinc Dust (pt. C)	1 gallon pail short filled	27.5 lbs. (12.8kg)

### Storage

One year from date of manufacture when maintained in protected area at a temperature of 40° to 100°F (4° to 38°C). Subject to inspection thereafter.

### 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](http://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](http://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. **NOT INTENDED FOR RESIDENTIAL USE.**

#### 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.