Vers-E-Poxy 122

Water Reducible Polyamide Epoxy

TECHNICAL DATA

Product Description

Vers-E-Poxy 122 is a revolutionary, water reducible, polyamide epoxy formulated to provide a variety of substrate types the ultimate in protection even when exposed to extreme environments. Against abrasion, moisture, corrosive fumes and chemicals, Vers-E-Poxy 122 will protect your substrates from costly deterioration. Its outstanding adhesion to a variety of surfaces and excellent corrosion resistance make it an outstanding choice to provide long-term protection of your substrates. Its ability to be applied to damp surfaces, high pH (6 to 13), and most tightly adhered, existing coatings makes it a unique choice for difficult substrates. Vers-E-Poxy 122 cures through a wide range of temperatures allowing for maximum flexibility in application.

Intended Uses

Apply to:

- Structural or support steel
- Ferrous Metal and Piping
- Galvanized Metal
- Composites
- Aluminum
- Masonry surfaces
- Zinc Rich Products

Protects:

- Shower/Locker Rooms
- Equipment
- Operating Rooms
- Laboratories
- Processing plants
- Material handling facilities
- Power generating plants

The above are general recommendations and not intended to limit the use of Vers-E-Poxy 122. Test areas are always recommended to confirm results.
NOT INTENDED FOR IMMERSION SERVICE.

Physical Properties

Resin Type	2 Component Water Reducible Polyamide Epoxy
Finish/Sheen	High Semi-Gloss, 60+ @ 60°
Bases	White Base MF-1231, Deep Base MF-1233, Neutral Base MF-0234 Tintable in "ACS".
Cure	MM-0230
Mixing Ratio by volume	7 parts resin to 1 part cure
Solids By Weight	67%
Solids by Volume	53%
Theoretical Coverage*	850 ft^2/gal @ 1 mil
Dry Film Thickness / Coat	2.0–3.0 mils (50–75 microns)
Wet Film to Achieve DFT	3.75–5.7 mils (93.75–142.5 microns)
Coverage at DFT*	283–425 ft^2/gal
Wet Film Thickness (Maximum)	12.0 mils (300 microns)
VOCs	0.3 lbs./gal (35 grams/liter)
Thinning	Water as Needed
Clean-up Solvents	Water
Drying Time** ASTM D1640 - 83 Reapproved 1989	**Set to Touch:** 2 hours at 70°F (21°C) and 50% Relative Humidity **Recoat:** Minimum 2 hours at 70°F (21°C) and 50% Relative Humidity
Induction Time	None
Pot Life	2.5–3.0 hours

* 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.

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Performance Characteristics

Vers-E-Poxy 122 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	250 mg loss
Cyclic Weathering	ASTM D-5894 1,500 hours	no blistering, face rust rated 10, 3–4 mm scribe creepage
Impact Resistance	ASTM 2794	Direct 25 in./lbs. Reverse 5 in./lbs.
Heat Resistance	ASTM D 2485 High Temperature Service	Passes at 250°F (121°C)
Pencil Hardness	ASTM D 3363	B-2B
Corrosion Resistance	ASTM B 117-94 Salt Spray (Fog) Test 850 hours	no face blistering, no face rust, 1 mm scribe creepage

Chemical Resistance for Splash and Spillage

Solvents:		**Oils:**	
Toluene	E	Dirty Motor Oil	E
Xylene	E	Skydrol	VG
Unleaded Gas	E	**Salts and Bases:**	
Denatured Alcohol	VG	Sodium Hydroxide	VG
Methanol	VG	**Miscellaneous:**	
Mineral Spirits	E	Water	G
Triethylamine	E	TSP 1%	G
MIBK	E	TSP 10%	G
Perchlorethylene	E	Windex w/Ammonia D	G
Ethylene Glycol	G		

Ratings: E - Excellent, VG - Very Good, G - Good

The information included in this chart reflects Vers-E-Poxy 122 resistance to these chemicals in environments where the coating may periodically come in contact with such materials. Cleaning and general maintenance will prolong the integrity of all epoxy coatings. For more detailed information, contact your local Diamond Vogel sales representative.

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 7 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-E-Poxy 122 is self-priming on masonry 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.

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.

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 Cleaning.

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.

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.

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Surface Preparation (Continued)

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.

Application

Part A (resin) and Part B (cure) are packaged in pre-measured kits. The mixing ratio is 7 parts 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 Jiffy mixer to disperse pigments. The material must be applied within the estimated pot life. For optimum application, air and surface temperature 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. A minimum surface temperature of 50°F (10°C) for eight (8) hours after application is recommended to achieve proper film formation.
Brush or Roller: 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). Allow the product to dry between coats. A good quality synthetic brush will make application easier. Select a roller cover suited for the texture of the surface to be coated.
Airless Spray: Flush airless lines with water. Equipment must be clean prior to start. Apply a wet coat in even, parallel passes with 50% overlap to avoid bare areas and pinholes.

Tip Orifice	Atomizing Pressure	Material Hose ID	Manifold Filter
0.017" to 0.019"	2800–3000 PSI	1/4" or 3/8"	60 mesh

Packaging

Product	1 Gallon Kit	5 Gallon Kit
Part A Resin	1 Gallon (short filled)	5 Gallon (short filled)
Part B Cure	1 Pint (full filled)	1 Gallon (short filled)

Shipping Weight

Product	1 Gallon Kit	5 Gallon Kit
Part A Resin	11.30 lbs. (5.12 kg)	55.10 lbs. (24.99 kg)
Part B Cure	1.36 lbs. (0.62 kg)	6.38 lbs. (2.89 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.**

Storage

8 months 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 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.

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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

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.
Cautions and Warnings information is located on the back panel of each product label.
For current information regarding VOC regulations for specific geographical regions, please contact Technical Service at Diamond Vogel Corporate Headquarters, (Contact information is located at the bottom of the page).

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