

VITRETHANE 445

TECHNICAL DATA SHEET

Single Pack High Build Zinc Phosphate Primer



A & I Coatings VITRETHANE 445 is a single pack high build anti-corrosive alkyd primer for steel. V445 is suitable for applications where combination of fast drying, adhesion, and abrasion resistance is required. It provides good anti corrosion properties and has excellent application and filling properties.

USES & BENEFITS	• Metal fabrication • Structural steel • Machinery & Equipment • Cranes • Trusses • Gates • Tanks				
	Benefits 1. Excellent adhesion to ferrous and non-ferrous metals 2. One pack convenience 3. Very good corrosion resistance 4. Rapid drying and overcoating times		Limitations 1. Not suitable for long term extended protection without overcoating. For a severe marine environment, it should be overcoated within a week. Durability of up to 3 months is expected in mild marine environment. With reasonable storage conditions coated substrates will be protected for over a year. 2. Not suitable for immersion 3. Do not apply when humidity is over 80%		
PHYSICAL PROPERTIES	Vehicle Type	Alkyd Primer with Zinc Phosphate			
	Finish	Matt			
	Theoretical Coverage	10m² /litre/40 microns. (100µm WFT)			
	Volume Solids	40%			
	Recommended DFT	20 - 40µm dependent on specification (Do not over apply per coat as excessive thickness results in poor adhesion and extended drying time)			
	Usual No. of Coats	One to two			
	Colour	Grey or white, Beige			
	Pigmentation	Inhibitive pigment			
ENGINEERING DATA	Abrasion Resistance	Good			
	Immersion	Not recommended			
	Chemical Resistance	Dependent upon selection of topcoat			
	Dry Heat Resistance	Up to 120°C			
	Solvent Resistance	Dependent upon selection of topcoat. Good to hydrocarbons. Not recommended for alcohols, esters or ketones			
	Durability	Good			
CURING DATA	Substrate Temp.(°C)	Surface Dry	Dry to Handle	Full Cure	Recoat Min
	Standard Hardener 25°C	30 Min	3 – 4 Hr	Overnight	2 Hr
	Note: Recoat time 3 months maximum				
APPLICATION DATA	Mixing	Stir thoroughly until uniform before use.			

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APPLICATION DATA	Application	Conventional Spray: Thin up to 10% by volume. Apply at air atomising temperature of 350-420kPa. Airless Spray: Thinning not required. Use tip orifice 0.275-0.325 mm at 14-17 MPa atomising pressure. Electrostatic Spray, roller or brush suitable for small areas only.
	Cleaning	V102 Cleaning Thinners.
	Thinning	Not required, however, may be reduced by 10% by volume using 10% V104 Fast Thinners.
SURFACE PREPARATION	All Surfaces	All surfaces to be structurally sound and free of contamination, particularly salt deposits. loose or flaking paint must be removed by abrasive blast cleaning, power tool cleaning or sanding. Oil, grease, dirt etc. must be removed with detergent and water blasting in accordance with AS 1627.1.
	Steel structures Light Duty	Degrease the surfaces and remove all weld spatter and flux. Grind sharp edges and corners. For best results abrasive blast clean to specified/recommended AS 1627-1 to 10 class Sa 2.5. Apply A & I Coatings VITRETHANE 445 Primer to specification. Please consult A & I Coatings Technical team for particular specifications.
WORK STOPPAGES	General	Material may remain in hoses, spray guns and application equipment between periods of use, provided the equipment is properly sealed to prevent contamination or moisture ingress. Before recommencing work after extended stoppages, inspect equipment and flush or clean as required using the A&I Coatings recommended cleaner. For prolonged shutdowns, it is recommended that work recommences using freshly mixed material.
	Clean Up	Clean all equipment after use with A & I Coatings recommended cleaner. It is good work practice to periodically flush out spray equipment during the course of the working day. Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including and delays.
PACKING & STORAGE	Packing	Available in 4 or 20L pails. For availability of other sizes, contact A & I Coatings.
	Storage	12 months if stored in sealed containers away from heat & moisture. Subject to re-inspection thereafter.
HEALTH & SAFETY	All applicable statutory regulations must be observed in the application of this product. Users must first read the Material Safety Data Sheet for Vitrethane 445. Users should familiarise themselves with all the safety aspects of the product prior to usage.	

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Please ensure the current Technical Data Sheet is consulted prior to specification or application of A & I Coatings products. If the surface intended to be painted differs from the specification, please consult the A & I Coatings Technical team on 1800 819 585.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation. Note: The figures quoted for pot life and drying/curing times are not definitive. They are dependent on-site conditions, such as volume of material mixed, ambient and substrate temperatures, weather and ventilation.

DISCLAIMER: Since the use and application of this product is beyond our control, we cannot be held responsible for product field performance. The information presented above is the result of our considerable experience with this product but is not to be construed as a performance warranty