

# Technical Data Sheet No 035

# VITRETHANE 450

# **Two Pack High Build Etch Primer Surfacer**

**PRODUCT DESCRIPTION:** A & I Coatings VITRETHANE 450 is a two pack polyurethane high build primer surfacer with excellent rust-inhibiting properties for application to steel, aluminium or galvanised surfaces. Vitrethane 450 also has excellent filling properties.

CASA approved for aeroplanes.

## **TYPICAL APPLICATIONS:**

### As a primer or build coat for:

- Aluminium Metal Steel •
- Trusses
- Copper and its alloys
- Structural Steel
- Galvanized Steels
- Metal Fabrications
- **Smooth Cementitious Surfaces**  Aluminium Sheet & Extrusions
   Purlins •

## TECHNICAL INCODMATION

TECHNICAL INFORMAT	ION			
Vehicle Type	: Acrylic Polyol			
Hardener	: Isocyanate			
Pigmentation	: TiO2, Rust Inhibitive pigments			
Mixing Ratio	: Pack A + Pack B = 4:1			
Pot life	: 6 Hrs +- 1Hr @ 25 °C			
Finish	: Low Sheen			
Colour	: Light grey or white			
Dry time	: Touch dry 25 min @ 25°C			
(minimum)	Dry to handle 6 hours @ 25°C			
	Full cure 7 days @ 25ºC			
Recoat time	: 4Hr @ 25 °C			
(minimum)				
Theoretical Coverage	: 5.7 m²/Litre @ 75 μ DFT or 182 μ WFT			
Volume Solids	: 43%			
Recommended DFT	: 75 μm			
Usual no. of coats	: 1-2 Coats			
Flexibility	: Good			
Abrasion Resistance	: Good			
Bacterial Resistance	: Good			
Chemical Resistance	: Good			
Dry Heat Resistance	: Up to 120 °C			
Solvent Resistance	: Good			
Salt Spray Resistance	: Good			
Thinning and cleaning	: Vitrethane 111. Up to 20%.			
Durability	: Excellent when suitably top coated.			
Product weight	: Pack A 1.38Kg/L, Part B 0.90Kg/L			
MERITS:		LIMITATIONS:		
<ol> <li>Excellent rust-inhibiting and filling properties.</li> <li>CASA approved for aeroplanes.</li> </ol>		<ol> <li>In early stages of curing the film may be susceptible to mechanical damage.</li> </ol>		
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- 2. CASA approved for aeroplanes.
- 3. Excellent adhesion to a variety of suitably prepared substrates.
- 4. Positive curing even at low temperatures.
- 5. Excellent hold-out ensuring maximum gloss development of pigmented Urethane systems top coat.



APPLICATION DATA			
Mixing	: Stir Part A before us and mix with V450 Part B at 4:1 ratio, by volume.		
Equipment	: Airless, HVLP, Air atomisation		
Cleaning	: Vitrethane 102 Cleaning Thinners or Vitrethane 111 Medium Thinners		
Typical Specification	: Mild Steel	Cleanse to AS1627.1	1. Vitrethane 450 to 60 Microns 2. Vitrethane 630/640 to 60 Microns
	Aluminium Ga	Ivanised Steel	
		Cleanse to AS1627.1	1. Vitrethane 450 to 20 Microns

#### SURFACE PREPARATION:

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

#### Concrete surfaces

Allow new concrete surfaces to cure for a minimum of 28 days before painting. Surface to be painted should be free from oil, grease etc in accordance with SSPS – SP1. To get uniform surface profile, use shot blasting, diamond grinding or acid etch. (**Note**: Acid etching is not recommended if excessive form oil is present in the concrete).

#### Aluminium, galvanised steel and Zincalume

Remove oil and grease with mild detergent or with solvent to AS 1627.1. Slightly roughen the surface by sanding or light whip blasting with a non-metallic abrasive. Apply suitable primer according to specification.

#### Steel structures

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 450 Primer to specification. Please consult A & I Coatings Technical Team for particular specifications.

**WORK STOPPAGES** : Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with **A & I Coatings** recommended cleaner. Once units of paint have been mixed they should not be resealed and it is advised that after prolonged stoppages work recommences with freshly mixed units.

**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 delays.

PACKING & STORAGE Packing	: Available in 5 or 20L kits. For availability of other sizes, contact <b>A &amp; I Coatings.</b>
Storage	: 12 months if stored in sealed containers away from heat and moisture. Subject to re- inspection thereafter.

**HEALTH AND SAFETY** : This product contains isocyanate. All applicable statutory regulations must be observed in the application of this product. Users must first read the Material Safety Data Sheet for Vitrethane 450. Users should familiarize themselves with all the safety aspects of the product prior to usage.

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.

For additional information, phone our Customer Service Centre on 1800 819 585, or e-mail <u>helpdesk@aicoatings.com</u> Visit our website for more products: <u>www.aicoatings.com</u>

June 2014 - THIS DATA SHEET SUPERSEDES THOSE PREVIOUSLY ISSUED.

**V450 TDS** 

2. Vitrethane 630/640 to 50 Microns