

Two Pack Polyurethane Premium Exterior Coating

VITRETHANE 640

PRODUCT DESCRIPTION: A & I Coatings VITRETHANE 640 is a two pack high performance reactive acrylic crosslinked with aliphatic isocyanates at room temperature or under low bake conditions.

TYPICAL APPLICATIONS:

- Aircraft (CASA Approval Available)
- Motor Vehicles & Truck cabins.
- Coaches.
- Locomotives.
- Aircraft.
- Marine applications.
- Facades.

TECHNICAL INFORMATION

Vehicle Type	: Acrylic polyol.
Hardener	: Isocyanate.
Pigmentation	: Titanium Dioxide or other colours.
Mixing Ratio	: 2:1 (Pack A : Pack B) by Volume
Pot life	: 4 hours at 20°C
Finish	: Brilliant gloss, satin, metallic or pearl. A coat of V640 Clear over V640 Metallic or V404 metallic basecoat on wet on wet application is recommended for ultimate durability.
Colour	: Unlimited colour range, metallic or pearlescent finish.
Dry time (minimum)	: Dust free 45 mins @ 25°C Touch dry 2 hours @ 25°C Dry to handle 6 hours @ 25°C Full cure Hard enough to handle overnight but progressively cures over 7 days.
Recoat time (minimum)	: Recoat when solvent released from previous coat, normally approx. 2 – 12 hours at 20°C.
Primer Required	: Yes, dependant on substrate.
Theoretical Coverage	: 9m ² /Litre/50 microns theoretical.
Volume Solids	: 48% (white); 45% (clear).
Recommended DFT	: 50µm to 100µm dry film thickness.
Usual no. of coats	: 1 – 2 coats.
Flexibility	: Permanent flexibility - adequate for any normal substrate movement.
Abrasion Resistance	: Excellent resistance to scrubbing and sand abrasion.
Bacterial Resistance	: Excellent.
Chemical Resistance	: Excellent resistance to a wide range of organic and inorganic acids. Good resistance to alkalis. Excellent resistance to water-splash and immersion.
Graffiti Resistance	: Excellent, most graffiti damage removed simply with cleanser.
Heat Resistance	: Good.
Solvent Resistance	: Excellent resistance to solvents, petrol and oils.
Salt Spray Resistance	: Excellent.
Thinning	: Thin to a viscosity of 16-20 seconds Ford Cup No 4. Normally approx 20-30% with V111 Medium Thinners < 15° V108 Slow Thinners 15°C - 25°C V115 Retarder >25°C
Durability	: Superior.
Product weight	: 1.02 – 1.40Kg/L (Pack A); 0.99 – 1.03Kg/L (Pack B)

MERITS:

1. Excellent weathering performance.
2. Excellent application properties.
3. Excellent chemical resistance.
4. Good recoatability.

LIMITATIONS:

1. To avoid the problem of solvent popping, choose different thinners depending on temperature and humidity.
2. The coating should be left in dust free area to dry to avoid surface defects.

APPLICATION DATA

Mixing : Pack A to be mixed thoroughly with Pack B (Hardener).

Equipment : Air atomisation, airless, air assisted airless, HVLP (**A & I Coatings** Technical staff can assist in this area).

Cleaning : V102 Cleaning Thinners or V111 Medium Thinners

Typical Specification :

Substrate	Surface Preparation	Specification	
Aluminium, Galvanised Steel & Zincaneal Stainless Steel	Abrade by appropriate means, clean to AS1627.1	1.Vitrethane 450 2.Vitrethane 640	To 30 microns To 60 microns Total 90 microns DFT
Mild Steel Motor Vehicle & Prime Movers	Abrade by appropriate means, clean to AS1627.1	1.Vitrethane 450 2.Vitrethane 640	To 75 microns To 70 microns Total 145 microns DFT
Mild Steel Trailers & Chassis etc.	Abrasive blast clean to AS1627.4 Class 2½	1.Vitrethane 450 2.Vitrethane 640	To 75 microns To 70 microns Total 145 microns DFT
Sound Existing Paint	Abrade by appropriate means, clean to AS1627.4	1.Vitrethane 450 2.Vitrethane 640	To 30 microns To 60 microns Total 90 microns DFT
Fibreglass	Abrade by appropriate means clean to AS1627.4	1.Vitrethane 450 2.Vitrethane 640	To 30 microns To 70 microns Total 100 microns DFT

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

Aluminium, galvanised steel and Zinalume

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.

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 580** Primer to specification. Please consult **A & I Coatings** Technical team for particular specifications.

CFC and Cementitious Board

All surfaces to be structurally sound and free of contamination, particularly salt deposits. Loose or flaking paint must be removed by 180 grit sandpaper with orbital sanding to achieve smooth uniform surfaces, providing a sound mechanical key profile for the topcoat to adhere to. Ensure surface is dry and free of all sand, dust, oil, grease and moisture before application of primer – Vitrethane 555 or similar.

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 and delays.

PACKING & STORAGE

Packing : Available in 6L or 24L packs. For availability of other sizes, contact **A & I Coatings**.

Storage : 12 months if stored in sealed containers away from heat and moisture. Subject to re-inspection thereafter.

HEALTH AND 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 640. Users should familiarise 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**.

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