

VITRETHANE 644

TECHNICAL DATA SHEET

Two Pack Polyurethane Anti-Graffiti Coating



A & I Coatings **VITRETHANE 644** is a two-pack premium quality high performance polyurethane based on reactive acrylic crosslinked with aliphatic isocyanates.

USES & BENEFITS	In-factory painting of building • Cladding and fascia's where anti-graffiti properties are called for • Tunnel linings • Graffiti resistant coatings			
	1. Excellent weathering performance 2. Excellent application properties 3. Excellent chemical resistance			
PHYSICAL PROPERTIES	Vehicle Type	Acrylic polyol		
	Hardener	Isocyanate		
	Mixing Ratio	3 : 1 (Part A : Part B) by Volume		
	Pot Life	6 hours at 20°C		
	Finish	Satin		
	Theoretical Coverage	8.7m ² / Litre /50 microns theoretical		
	Volume Solids	44%		
	Recommended DFT	50µm – 100 DFT		
	Usual No. of Coats	1 double header coat. If left too long first coat will need to be sanded thoroughly		
	Colour	Unlimited colour range		
	Pigmentation	Titanium Dioxide or other pigments		
	Product Weight	1.02 – 1.30Kg/ Litre		
ENGINEERING DATA	Abrasion Resistance	Excellent resistance to scrubbing and sand abrasion		
	Flexibility	Permanent flexibility - adequate for any normal substrate movement		
	Bacterial Resistance	Excellent		
	Graffiti Resistance	Excellent, most graffiti damage removed simply with cleanser		
	Chemical Resistance	Excellent resistance to a wide range of organic and inorganic acids		
	Dry Heat Resistance	Good		
	Solvent Resistance	Excellent resistance to solvents, petrol and oils		
	Water Resistance	Excellent		
CURING DATA	Durability	Excellent		
	Substrate Temp.(°C)	Surface Dry	Dry to Handle	Full Cure
		25°C	30 Min	2 Hrs
Hard enough to handle overnight but progressively cures over 7 days				

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APPLICATION DATA	Mixing	Pack A to be mixed thoroughly with Pack B (Hardener).			
	Application	Air atomisation, airless, air assisted airless, HVLP (A & I Coatings Technical staff can assist in this area). Brush and roller are only suitable for small areas.			
	Cleaning	Vitrethane 107 or V111 Medium Thinners.			
	Thinning	Thin 5 to 10% by volume with V107 Fast Thinners or V111 Medium Thinners.			
	Typical Specification	Rural & Light Industrial Environment:			
		Substrate	Surface Preparation	Specification	
		Zincalume Cladding	Cleanse to AS1627.1	Vitrethane 440 Vitrethane 644	30 microns 70 microns Total 100 mic
Colourbond Cladding		Cleanse to AS1627.1	Vitrethane 644	50 microns Total 50 mic	
C.F.C. Compressed Fibrous Cement		Sand/brush down	Vitrethane 555 Vitrethane 644	100 microns 70 microns Total 170 mic	
Mild Steel		Abrasive blast clean to AS1627.4 Class 2½	Vitrethane 580 Vitrethane 644	100 microns 70 microns Total 170 mic	
Galvanised Steel & Aluminium	Abrade by appropriate means clean to AS1627.1.	Vitrethane 440 Vitrethane 644	30 microns 70 microns Total 100 mic		
NOTE: XRW Colour bond requires special primer.					
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	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.			

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SURFACE PREPARATION (Cont.)	Aluminium, Galvanised steel & 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.
	CFC & 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	General	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 4L or 20L 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 & SAFETY	All applicable statutory regulations must be observed in the application of this product. Users must first read the Safety Data Sheet for V644. Users should familiarize themselves with all the safety aspects of the product prior to usage	

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 onsite 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.



PO Box 820 Moss Vale, NSW 2577

7 Lackey Road Moss Vale NSW 2577

Australia 1800 819 585

International +61 2 4869 1441

Fax +61 2 4868 3031

Email helpdesk@aicoatings.com

www.aicoatings.com.au