

VITRETHANE 650



Two Pack Isocyanate Free Polyurethane Exterior Coating

Technical Data Sheet Number 1071

PRODUCT DESCRIPTION	A & I Coatings VITRETHANE 650 is a solvent based two pack isocyanate free polyurethane with very good exterior durability and excellent application properties.				
USES & BENEFITS	<ul style="list-style-type: none"> • Original equipment manufacture • Steelwork • Trucks and buses • Mining infrastructure • Suitable for toys and playground equipment in accordance with AS1924.1 • Machinery 				
	<p><u>Benefits</u></p> <ol style="list-style-type: none"> 1. VITRETHANE 650 is an isocyanate free polyurethane (patent pending technology) 2. Equal to or better than isocyanate cured polyurethane durability 3. Brilliant gloss 				
PHYSICAL PROPERTIES	Vehicle Type	Based on polyurethane resin			
	Hardener	Proprietary			
	Mixing Ratio	4:1 (Pack A : Pack B) by Volume			
	Pot Life	4 hours at 20°C			
	Finish	Brilliant gloss or satin			
	Theoretical Coverage	10m ² /litre/50 microns theoretical (dependant on colour of coating)			
	Volume Solids	White 50% (Pack A : Pack B)			
	Recommended DFT	50 to 100 microns dry film thickness			
	Primer Required	Yes, dependant on substrate. Contact A & I Coatings for specific applications			
	Usual No. of Coats	1 – 2 coats			
	Colour	Unlimited colour range			
	Pigmentation	Titanium Dioxide and other organic and inorganic pigments			
	Product Weight	Pack A 0.96 – 1.28Kg/L dependant on pigmentation; Pack B 0.99Kg/L			
ENGINEERING DATA	Abrasion Resistance	Excellent resistance to scrubbing and sand abrasion			
	Flexibility	Excellent flexibility - adequate for normal substrate movement			
	Bacterial Resistance	Good			
	Chemical Resistance	Good			
	Dry Heat Resistance	Good			
	Solvent Resistance	Moderate resistance to solvents and oils			
	Salt Spray Resistance	Good			
	Durability	Very Good			
CURING DATA	Substrate Temp.(°C)	Touch Dry	Dry to Handle	Full Cure	Recoat Min
	15 °C				
	25 °C	15 Min	6 Hrs	7 Days	15-30 Min
	35 °C				

APPLICATION DATA	Mixing	Pack A to be mixed thoroughly with Pack B (Hardener) prior to use.
	Application	Airless, air assisted airless, electrostatic, HVLP, air atomisation. (A & I Coatings technical staff can advise on the most appropriate equipment for a specific task). Brush and roller are only suitable for small areas.
	Cleaning	V102 Cleaning Thinners or V111 Medium Thinners.
	Thinning	Thin to a viscosity of 16-20 seconds Ford Cup No 4 using VITRETHANE V111 Medium Thinners below 25°C or V108 Slow Thinners above 25°C or V112 Retarder above 30°C. Normally about 15 – 20% is required.
	Typical Specification	<u>Mild steel or galvanised steel:</u> 1. Vitrephos 560 to 75 - 200 microns DFT 2. Vitrethane 650 to 70 microns DFT
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.
	Aluminium, Galvanised Steel & 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.
	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 560 Primer to specification. Please consult A & I Coatings Technical team for particular specifications.
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 5 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 Material Safety Data Sheet for Vitrethane 650. 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.	
	Note	May be recoated after tack dry 15 – 30 minutes. Can be recoated after 48 hours at 25°C

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 on 1800 819 585.

September 2021 - THIS DATA SHEET SUPERSEDES THOSE PREVIOUSLY ISSUED.