

VITRETHANE 638



Two Pack Polyurethane High Build Floor Coating

Technical Data Sheet Number 110

PRODUCT DESCRIPTION	<p>A & I Coatings VITRETHANE 638 is a two pack non-yellowing polyurethane finish, based on reactive polyester resin cross-linked using aliphatic isocyanate. V638 offers good application properties, fast dry and cures to a tough coating with excellent abrasion resistance.</p>				
USES & BENEFITS	<ul style="list-style-type: none"> • Seamless flooring • Topcoat for pre-primed concrete floor • Other substrates which need a high build non-yellowing tough coating 				
	<p><u>Benefits</u></p> <ol style="list-style-type: none"> 1. Very tough and excellent chemical resistance 2. Good, flow & levelling, even at high build 3. Low yellowing 4. Excellent abrasion resistance 	<p><u>Limitations</u></p> <ol style="list-style-type: none"> 1. For concrete or other high alkaline content substrates it is necessary to apply a primer or sealer to the substrate before applying V638 			
PHYSICAL PROPERTIES	Vehicle Type	Polyurethane			
	Hardener	Isocyanate			
	Mixing Ratio	3:1 (Pack A : Pack B) by Volume			
	Pot Life	1.5 hours approx. @ 20°C			
	Finish	Gloss, Semi-gloss 50% or Satin 30%.			
	Theoretical Coverage	5.7m ² /Litre/coat at 100µm DFT			
	Volume Solids	57%			
	Recommended DFT	Dependant on specific requirements			
	Primer Required	Yes, dependant on substrate. (A & I Coatings staff can advise on the most appropriate primer coat for a specific task).			
	Usual No. of Coats	Dependant on specific requirements			
	Colour	Clear and various colours			
	Product Weight	1.04Kg/Litre(Pack A); 1.07Kg/Litre(Pack B)			
ENGINEERING DATA	Abrasion Resistance	Excellent resistance to scrubbing and wet and dry sand abrasion			
	Flexibility	Excellent			
	Bacterial Resistance	Excellent			
	Chemical Resistance	Excellent resistance to a wide range of inorganic and inorganic acids. Good resistance to alkalis			
	Graffiti Resistance	Most graffiti damage removed with suitable graffiti remover			
	Dry Heat Resistance	Very good			
	Solvent Resistance	Excellent			
	Salt Spray Resistance	Very good			
	Durability	Non yellowing and good gloss retention			
CURING DATA	Substrate Temp.(°C)	Touch Dry	Dry to Handle	Full Cure	Recoat Min
	15 °C				
	25 °C	2 Hrs	8 Hrs	7 Days	12 Hrs
	35 °C				
	Note	Full cure: Dry overnight. Progressively cures over 7 days.			

APPLICATION DATA	Mixing	Thoroughly mix Pack A & Pack B with hand or mechanical stirrer before and after mixing together. Please note: Fast Hardener is to be used for internal applications. Slow Hardener is to be used for exterior applications.
	Application	Roller, airless, air assisted airless, air atomisation.
	Cleaning	Solvent.
	Thinning	Using V111 Medium Thinners or V108 Slow Thinners above 25°C or V112 Retarder above 30°C.
	Typical Specification	<u>Concrete floor coating:</u> First coat (primer): E2000 Two Pack WB Epoxy Coating at 55µm DFT. Second coat (Topcoat): V638 Medium Build Exterior Urethane at 100µm 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.
	Concrete	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 Contact A & I Coatings team for preparation details & primer specifications.
	Aluminium, Galvanised Steel & Zincalume	Remove oil and excess grease with mild detergent or with sugar soap. Slightly roughen the surface with the help of sanding or light whip blasting with a non metallic abrasive. Apply suitable primer according to specification.
	Repaints	All surfaces should be free from oil, grease, loose paint and other contaminants. Though Vitrethane 638 may give good adhesion, a test patch is always necessary before use.
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 10L packs. 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 638. 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 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.

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