VITRETHANE 633

TECHNICAL DATA SHEET

Two Pack Polyurethane Coating. Clear or pigmented.

A & I Coatings VITRETHANE 633 is a two pack non-yellowing polyurethane finish, based on reactive acrylic polyurethane. V633 offers good application properties, fast dry and cures to a hard wearing finish with excellent chemical and graffiti resistance.

USES & BENEFITS

Uses

• Seamless flooring • Topcoat for masonry floors and walls • Other substrates which need a non-yellowing tough coating
• Clear finish for epoxy flake systems

Benefits

1. Very tough and excellent chemical resistance
2. Good, flow & levelling
3. Excellent abrasion resistance
4. V633 may be used direct to concrete.
5. Clear formulation contains UV blockers to retard discolouration of underlying coats.

Limitations

1. Solvent based coating with high VOC
2. Pigmented gloss coatings not available.
3. Minimum surface temperature should be at least 3˚C above dew point at time of application and initial cure.

PHYSICAL PROPERTIES

Vehicle Type	Acrylic Polyurethane
Hardener	Isocyanate
Mixing Ratio	3: 1 (Pack A : Pack B) by Volume
Pot Life	Approximately 2 hours @ 25°C
Finish	Clear available in Satin or Gloss. Pigmented in Satin only
Theoretical Coverage	6.0 – 9.0m²/Litre @ 50 - 70µm(110 - 165µmWFT)
Volume Solids	43%
Recommended DFT	50 - 75µm for depending on substrate and exposure environment
Usual No. of Coats	2 coats
Primer Required	Can be applied direct to concrete. **For Clear finish, gloss coat must be used as primer if final finish is Satin.**
Colour	Clear or pigmented
Pigmentation	Various
Product Weight	1-1.25Kg/Litre dependent on colour.

ENGINEERING DATA

Abrasion Resistance	Excellent resistance to scrubbing and wet and dry sand abrasion
Bacterial Resistance	Excellent
Chemical Resistance	Vitrethane 633 displays resistance to many common chemicals in spill or splash situations at ambient temperatures. The following chemicals are an example only. Consult A&I for specific applications. · Hydrochloric Acid (10%) · Nitric Acid (10%) · Sulfuric acid (40%) · Uric acid (concentrated) · Sodium hydroxide (10%) · Hydrogen peroxide (3%) · MEK · Kerosene · Turpentine · Skydrol · Hydraulic Fluid · Brake Fluid · Motor Oil · Toluene · Organic Food Matter · Grease · Wine · Diesel · Hydrocarbon solvents Some chemicals may cause surface staining from prolonged exposure without impacting the coating integrity. Data is available on request. Exposure based on spills and splashes cleaned within 24hrs
Graffiti Resistance	Most graffiti damage removed with suitable graffiti remover
Dry Heat Resistance	120°C
Hot water resistance	70°C
Solvent Resistance	Excellent
Durability	Non yellowing and good gloss retention

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A&I COATINGS

CURING DATA	Substrate Temp.(°C)	Foot Traffic	Vehicle Traffic	Full Cure	Recoat Time min
	25 °C	16hrs	72hrs	7 Days	4 Hrs
	Note: When overcoating V633 with itself, application to occur within 72hrs at 25 °C No water or condensation should contact the coating for 2 days from installation.				
SURFACE PREPARATION	General	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 to cure for 28 days prior to coating. Surface must be sound, dry, free from all loose material, laitance, old coatings, dust and surface contaminants (e.g. oil, grease, chemicals, release/curing agents etc). Substrates must be mechanically treated by abrasive blasting or grinding to achieve a clean anchor pattern for best adhesion. Oily surfaces must be detergent cleaned and water blasted. Please note that moisture content in the concrete must be no greater than 4% pbw prior to application of the V633. Ensure no rising moisture will occur in concrete by means of an effective subgrade damp proof membrane. Concrete to be min 25Mpa compressive strength and 1.5Mpa pull off strength.			
	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 633 may give good adhesion, a test patch is always necessary before use.			
APPLICATION DATA	Mixing	Thoroughly mix Pack A & Pack B with mechanical stirrer in correct ratio for 2 minutes.			
	Application	Roller, airless, air assisted airless, air atomisation.			
	Ambient Temperature	Apply between 8-35 °C			
	Cleaning	Use Xylene or Acetone for clean up			
	Thinning	Thinning not required			
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 delays).			
PACKING & STORAGE	Packing	Available in 10L kits. 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.			

All applicable statutory regulations must be observed in the application of this product. Users must first read the Material Safety Data Sheet for Vitrethane 633. 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.