A&I COATINGS

Technical Data Sheet No. 045

Two Pack High Build Epoxy Coating
VITRETHANE 410

PRODUCT DESCRIPTION - A & I Coatings VITRETHANE 410 is a high solid high build epoxy coating with excellent adhesion properties.

TYPICAL APPLICATIONS

Long term protection to concrete and steel for a wide range of industrial applications:

- Factories/Warehouses
- Chemical plants
- Steel in extreme environments
- Aircraft hangars
- Repaints/ maintenance
- Food processing plants and abattoirs
- Pulp and paper plants
- Tank exteriors
- Effluent water treatment plants

TECHNICAL INFORMATION

Vehicle Type	: Two component epoxy.
Hardener	: Amine.
Pigmentation	: Titanium dioxide and other organic pigments.
Mixing Ratio	: 3 :1(Part A : Part B) by Volume.
Pot life	: Approx 1 hour@20ºC.
Finish	: Gloss.
Colour	: N35 Light Grey and other pastel colours to medium colour range.
Dry time (minimum)	: Touch Dry 4 - 6 Hours @25ºC Hard Dry 18 Hours @25ºC Full cure, continues to harden over next 7 days.
Recoat time	: 18 to 24 hours maximum. Varies with the environment and the topcoat used.
Primer required	: No, dependant on substrate. Contact **A & I Coatings** technical team for specifications.
Theoretical Coverage	: 5-7 m^2/L/coat @ 140μm/coat.
Volume Solids	: 85%.
Recommended DFT	: 250-350 microns.
Usual no. of coats	: 2 (dependant on substrate).
Abrasion Resistance	: Excellent.
Chemical Resistance	: Acid – Good. Alkali – Good. Not resistant to strong oxidising acids, phenols or amines. Contact **A & I Coatings** for specific recommendations.
Heat Resistance	: Up to 120ºC (Dry Heat).
Solvent Resistance	: Good.
Thinning	: If necessary with V122 Epoxy Thinners.
Durability	: Excellent, but will chalk under UV exposure without damage to the integrity of the coating.
Product weight	: 1.4Kg/Litre.
VOC content	: 150 grams/Litre.(APAS)

MERITS

1. Excellent adhesion.
2. Can be used as a self priming and porosity equaliser coat.
3. Tough, strong coating.
4. Can be used for immersion in water or sewerage.

LIMITATIONS

1. Not recommended for immersion in acids, alkalis or solvents.
2. Not to be applied to thermoplastic coatings.
3. Will chalk when continuously exposed to sunlight & UV light. The chalking in no way impairs the coating performance.
4. Not to be applied to a warming slab in case of out gassing.
5. Temperature at time of application should be at least 10°C.
6. Humidity should be less than 75%.

APPLICATION DATA

Mixing : Power stir Pack A, then blend with Pack B to correct ratio. Power stir thoroughly for at least two minutes prior to use. Only mix required amount and use within the stated pot life. Allow to stand for 15 minutes after mixing A & B. Thin if required for flow. **In cool weather, stir and let stand for a few minutes and then restir. This will eliminate the likelihood of amine bloom.**

Cleaning :Use V122 Epoxy Thinners.

Equipment :Apply evenly with a 10 – 13mm nap roller, or by brush or airless spray, taking care to apply at specified coverage rate. Primer coat may be thinned 20% with V122 Epoxy Thinners.

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, to AS 1627. Oil, grease, dirt etc must be removed with detergent and water blasting or solvent cleaning to AS1627.1. Primers should be abraded as necessary.

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.).
Smooth or contaminated surfaces 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. In some instances acid etch and water blasting may be adequate to form a 'key' for sufficient adhesion. Please note that moisture content in the concrete must be no greater than 4% prior to application of the V410.

Repaints

All surfaces should be free from oil, grease, loose paint and other contaminants. Though Vitrethane 410 may give good adhesion, a test patch is always necessary before use.

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 9. Apply **A & I Coatings** specified primer depending on corrosive environment with a high solid epoxy as a barrier coat. Please consult **A & I Coatings** Technical team for particular specifications.

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 4 or 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 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 410. Users should familiarise themselves with all the safety aspects of the product prior to use.

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.

For additional information, phone our Customer Service Centre on **1800 819 585.**

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