A&I COATINGS

Technical Data Sheet No.081

Two Pack High Build Anti Corrosive Primer

VITRETHANE V590

PRODUCT DESCRIPTION: A & I Coatings VITRETHANE 590 is a two pack fast drying, high solids Zinc Phosphate Epoxy coating that can be applied as primer /or intermediate coat at high film thickness and at low temperatures. This inhibitive primer can be recoated with wide range of top coats to give a durable paint system for immersion and non-immersion services.

TYPICAL APPLICATIONS

This General industrial and Marine grade primer can be used for:

- Oil rigs/refineries
- Chemical plants
- Galvanised steel
- Hydro-electric installations
- Waste/water treatment plants
- Pulp and paper mills
- Structural steel
- Tank farms
- Aluminium

TECHNICAL INFORMATION

Vehicle Type	:	Two component epoxy.			
Hardener	:	Polyamide.			
Pigmentation	:	Zinc Phosphate.			
Mixing Ratio	:	4 : 1 (Part A : Part B) by Volume.			
Pot life	:	2 Hrs @ 23ºC, less at higher temperatures.			
Finish	:	Flat.			
Colour	:	Grey.			
Dry time	:	**5ºC**	**10ºC**	**23ºC**	**40ºC**
		Surface dry	4 Hrs	2 Hrs	1 Hr	0.5Hr
		Thorough dry	10 Hrs	6 Hrs	3 Hrs	2 Hrs
		Full cure	13 Days	8 Days	4 Days	3 Days
Recoat time (**minimum**)	:	8 Hrs	4 Hrs	2 Hrs	1 Hr	
Theoretical Coverage	:	9.9m²/ Litre@ 75µm DFT (100 µm WFT)			
Volume Solids	:	75%.			
Recommended DFT	:	125 - 150 µm DFT.			
Usual no. of coats	:	1 – 2 Coats.			
Flexibility	:	Good.			
Abrasion Resistance	:	Very Good.			
Chemical Resistance	:	Excellent.			
Water Resistance	:	Very Good.			
Heat Resistance	:	Up to 90ºC (dry, continuous)			
Solvent Resistance	:	Excellent.			
Thinning and cleaning	:	V105 Fast Thinners or V111 Medium Thinners.			
Durability	:	Excellent when suitably top coated.			
VOC Content	:	230grams/Litre.			

MERITS:

1. Can be used where fast dry to recoat and/or dry to handle times are desired.
2. May be over coated with suitable top coats for both water immersion and non-immersion services.

LIMITATIONS:

1. Minimum temperature for satisfactory cure is 10°C. Extended cure times at a minimum temperature of 13°C is required for immersion service.
2. Drying and curing times are proportionally shorter at higher temperatures and longer at lower temperatures.

APPLICATION DATA

Mixing : Pack A to be mixed thoroughly with Pack B (Hardener) for 10 minutes prior to use.

Equipment : Airless spray Gun of 0.46 – 0.69 mmat 15 Mpa (2100 Psi) nozzle pressure. Brush or roller for touch up.

Cleaning : V102 Cleaning 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. Oil, grease, dirt etc must be removed with detergent and water blasting in accordance with AS 1627.1

Concrete surfaces

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 in accordance with SSPS – SP1. To get uniform surface profile, use shot blasting, diamond grinding or acid etch. (**Note**: Acid etching is not recommended if excessive form oil is present in the concrete).

Aluminium, galvanised steel and 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. Apply suitable primer according to specification.

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 10 class Sa 2.5. Apply **A & I Coatings VITRETHANE 590** Primer to specification. 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 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 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 590. Users should familiarize themselves with all the safety accepts 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 site 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.**

APRIL 2010 - THIS DATA SHEET SUPERSEDES THOSE PREVIOUSLY ISSUED.