

Technical Data Sheet No.023

Two Pack Epoxy Anti-Corrosive Primer

VITRETHANE 580

PRODUCT DESCRIPTION: A & I Coatings VITRETHANE 580 combines a high loading of zinc phosphate in an air impermeable matrix of hard epoxy resin. Its excellent adhesion and its corrosion inhibiting "throw" renders VITRETHANE 580 very effective in the control of rust on mild steel substrates. It usually forms the primer or intermediate coat of a heavy duty paint system in combination with a durable VITRETHANE Polyurethane topcoat finish.

TYPICAL APPLICATIONS:

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

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

Waste/water treatment plants

TECHNICAL INFORMATION

Vehicle Type : Two component epoxy.

Hardener : Polyamide. **Pigmentation** : Zinc Phosphate.

Mixing Ratio : 4 : 1 (Part A : Part B) by Volume.

Pot life : 8 hours at 23°C – do not use beyond pot life.

Finish : Flat. Colour : Grey.

Dry time : 10°C 23°C 40°C

Surface dry 4 Hrs 2 Hrs 1 Hr
Thorough dry 16 Hrs 8 Hrs 3 Hrs
Full cure 14 Days 7 Days 3 Days

Recoat time : 16 Hrs 8 Hrs 3 Hrs

(minimum)

Theoretical Coverage : 10m²/litre/50 microns DFT. (100μm WFT).

Volume Solids : 51% by volume.

Recommended DFT : Typically $100\mu m$ depending on specification.

Usual no. of coats : 1 – 2 coats.

Flexibility : Good.

Abrasion Resistance : Very good.

Chemical Resistance : Excellent.

Heat Resistance : Up to 90°C (Dry Heat).

Solvent Resistance : Excellent.
Water Resistance : Very good.

Thinning and cleaning : Thin approx 5-10% using V111 Medium Thinners (use also for cleaning) or V102 Cleaning

Thinners.

Durability : Excellent when suitably top coated.

VOC Content : 390grams/Litre.

MERITS:

- 1. Can be used where fast dry to recoat and/or dry to handle times are desired.
- 2. May be overcoated with suitable topcoats for better exterior performance.

LIMITATIONS:

1. Minimum temperature for satisfactory cure is 10°C. In temperature below 10°C V191 may be added to Pack B at a rate of 244g/L Pack B.



V580 TDS

APPLICATION DATA

Mixing : Pack A to be mixed thoroughly with Pack B (Hardener) for 20 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

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.

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 580** 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 580. Users should familiarise 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.