

Epoxy Barrier Undercoat

New Epoxy Technology

FEATURES

Advantages:

- Excellent build properties up to 150µm DFT in a two pass application
- Excellent surfacing and sanding properties
- Very good corrosion protection
- Wide maximum self re-coat times for easy project management
- Very good water and chemical resistance
- Long pot life
- Isocyanate free
- Epoxy Barrier Undercoat may be top-coated with both acrylic or polyester urethane finishes and is especially formulated as an undercoat or sealer under the Altex Elite[®] range of polyurethane finish coats
- May be used as a high build surfacer / undercoat for topcoating with Altex Polyurethane Undercoat
- May be used in immersion service as part of an Altex Yacht & Boat recommended system
- May be applied as a thin film (50µm DFT) tie/seal coat, or as a high build undercoat. (see overleaf)
- Formulated without lead, chromate or mercury containing materials

RECOMMENDED USES

Altex Yacht & Boat Paint Epoxy Barrier Undercoat is a high performance, sandable epoxy high build coating based on new technology Phenalkamide hybrid resins, which offers both superior corrosion and water resistance.

This new epoxy undercoat offers both the DIY and Professional applicator an easy to use product with a diverse range of uses and benefits.

Epoxy Barrier Undercoat is recommended for:

- Topside & Superstructure final sealing to provide an optimum surface for finish coating
- As a high build surfacer to remove defects and achieve a finish suitable for application of Altex Polyurethane Undercoat or one of the Elite Polyurethane finish coats
- As a high build barrier coat for below waterline application, used as part of an Altex Antifouling system
- Direct application to sanded GRP, epoxy laminated wood and epoxy sealed wood
- Direct application to epoxy faired surfaces
- Application over Altex Epoxy Primer or Altex Epoxy High **Build Surfacer**
- Priming / undercoating over degreased & sanded aged polyurethanes, epoxies, fairing systems, gelcoats, epoxy laminates & fibreglass

SPECIFICATION DATA

Coating Type: Colour:	Phenalkamide Epoxy NZ: Off-White & Light Grey Aust: Off-White
Packaging:	1.25, 5 & 10 Litre kit
Mix Ratio:	4 to 1 by volume
Volume Solids:	45% (mixed)
Gloss:	low sheen
Flash Point:	27°C Setaflash
Thinner: Spray: Brush/Roller: Pot Life:	Altex Thinning Solvent #12 Altex Thinning Solvent #22 8 hours at 25°C
Induction Time:	15 minutes
Density:	1.36 kg per litre
VOC (EPA 24):	468 grams per litre

Cure Time Notes:

Dry to sand times will increase with higher film builds, and/or lower temperatures.

Winter cure may be improved by utilising the following techniques.

Warm the paint in a bath of tepid water for 4-5 minutes before use Rest the mixed product for up to 30 minutes before thinning & application

(induction). Store the sealed containers in a warm location overnight - before mixing. Do

not heat the coating above 20-25°C. Warm the environment / substrate before application.

Control the film build (do not apply excessive amounts)

Provide optimal ventilation

Or, lightly sand the partially cured surface with 120 grit to open the film up & allow solvents to escape.

Theoretical Coverage 4.5 sq meters per litre				
Recommended Film 225-335 microns wet to passes)	Thickness Per Coat: o obtain 100-150* microns dry (*applied in two			
Application: Air or air	less spray, brush or roller			
Dry Times (25°C / 100) μm DFT / 50% RH):			
Touch Dry: 90) mins			
Dry to Sand: 6	hours			
Recommended Recoat:				
Min. Self Recoat:	30 – 60 mins between passes			
Min. To Overcoat:	6 hours between coats overnight for all other coatings excl. Antifoulings (see overleaf)			
Max. Self Recoat:	10 days without sanding.			
Max. To Overcoat: overcoating	10 days, thereafter thoroughly sand before			
• `	e additional notes opposite)			
Undercover with Elite®				
	sanded within 3 days of topcoating.			
Outside with Elite [®] Pol				
10 Days max - freshly sanded within 3 days of topcoating.				
<u>Cure</u> : Maximum cure times before topcoating are based on thorough fine sandin & dedusting within 3 days and solvent wining of the surface immediately before				

Сι & dedusting within 3 days and solvent wiping of the surface immediately before application of any subsequent coats.

If the coating has cured hard and will not adequately finish sand, then re-sand the surface with a coarse grade (80 – 180 grit) and reapply a coat of Altex Epoxy Barrier Undercoat or Altex Polyurethane Undercoat before finish coating.

All surfaces must be clean, dry, free of wax or any other contaminants and be suitably abraded.

GRP, Epoxy Undercoats, Polyurethane Finishes & Epoxy Glass Laminates:

Ensure the surface is thoroughly clean. Degrease and de-wax using Altex D30 Degreaser/Dewaxer if necessary. Abrade the cleaned surface using non-lubricated sandpaper such as Wet-Or-Dry paper. Depending upon the surface being prepared and the intended service, sandpaper grades may vary between 80 grit and 180 grit, with grades in the range of 100 to 120 grit providing optimum anchor pattern and with minimal sanding 'grinthrough'.

Apply Altex Epoxy Barrier Undercoat to the prepared surface.

<u>Timber:</u> All exposed timber surfaces should be sealed with Altex TimberSealer before application of Epoxy Barrier Undercoat.

Aged Epoxy High Builds, Fillers & Fairing:

Ensure the surface is free of grease and other foreign matter. Initially sand using 40 - 60 grit non-lubricated sand paper, dedust and re-sand with 80 to 120 grit.

Apply Altex Epoxy Barrier Undercoat to the prepared surface.

Steel Surfaces:

All exposed mild & corten steel surfaces should be primed with Altex Epoxy Primer before application of Epoxy Barrier Undercoat.

<u>Aluminium:</u> All aluminium surfaces should be primed with Altex Epoxy Aluminium Primer, or Altex Epoxy Primer before application of Epoxy Barrier Undercoat.

Please refer to the appropriate Data Sheet for all products listed above.

DIRECTIONS FOR USE

Mixing:

Thoroughly power mix Part A first to obtain a smooth, blended homogeneous condition. Measure out 4 parts Altex Epoxy Barrier Undercoat Part A into a clean mixing container and add 1 part of Part B slowly with continued stirring. Continue to stir for at least 5 minutes. Allow an induction time of 15 minutes before thinning & application.

Care must be taken to accurately measure each component if mixing part packs.

The pot life of the mixed material is 8 hours at 25°C. Higher temperatures will reduce the working life of the coating; lower temperatures will increase it.

Thinning:

<u>Undercoating</u>: To achieve the desired build, thinning should be limited to no more than 10% with Altex Thinning Solvent #12 with two passes (min) required to achieve the desired dry film build of 150 μ m. For optimum build, thin only sufficiently to achieve good atomisation.

<u>Seal Coating:</u> Thin 20-30% with Thinning Solvent #12 and use a fine, finishing tip to achieve a well atomised, thin film of 50 μ m dry film thickness.

For brush application, thin no more than 10% with Thinning Solvent #22. Thin only sufficiently to assist application.

Clean-up: Use Thinning Solvent #12.

Application: Altex Epoxy Barrier Undercoat may be applied by spray, brush or roller. Application by either airless or conventional air spray equipment is the preferred method

Suggested spray equipment is:

Air Spray:	<i>Graco</i> - Delta Air Spray; 1.2 – 1.8mm Fluid Nozzle	
	DeVilbiss - JGA Gun, E Fluid Nozzle, 78 Air Nozzle	
Airless Spray:	Graco - 30:1 pump, Contractor Gun, 0.015- 0.019" RAC IV tip	

(Note: Other equipment equivalent to the above may be used.)

<u>Roller Application</u>: Use a 5mm nap roller – longer fibres will prove to be difficult to use. In cooler temperatures (<20°), try to avoid thinning to assist in achieving film build. In warmer temperatures, thin judiciously with Thinning Solvent #22. Excess thinning will compromise build properties.

Sanding: (Hand / Orbital) Hand: Altex Epoxy Barrier Undercoat is normally hand sanded with 220 grit (for further undercoating), followed by 320 grit sandpaper prior to topcoating. Orbital: up to 220 grit when being over-coated with Altex Polyurethane Undercoat, or 280 for finish coating. We recommend 3M Free-Cut®Gold or Norton NoFil®, (or equivalent) Zinc Stearate, or Calcium Stearate sandpapers for optimised sanding and self cleaning.

Attempting to orbital sand with 320 or finer will impair sanding properties and polish the surface.

Overcoating & Topcoating: For surface cleaning & dedusting prior to finish coating, fresh water rinse (as above) and / or use Altex C50 Surface Cleaner, or Altex Thinning Solvent #109, using the two-rag method. Do NOT use an epoxy thinner. We recommend the use of Tack Rags to remove dust residues.

Antifouling: Application of any Altex Antifouling should be completed before the Epoxy Barrier Undercoat has fully cured, i.e.: when the epoxy is tack free but still soft to finger pressure. Do not apply antifoulings to hard cured Altex Epoxy Barrier Undercoat. Application of the first coat of antifouling MUST be completed the same day as the final coat of Epoxy Barrier Undercoat.

Compatible Altex Primers:

Epoxy Aluminium Primer (less than 24 hours cured) Epoxy Primer (Degreased and chalk free) Epoxy High Build Surfacer (Sanded 80-220 grit) Epoxy TimberSealer (Lightly sanded to de-nib surface) Epoxy Resin / Microballoons (Sanded 80 – 120 grit)

Compatible Products for Overcoating:

Elite[®] Pro~Spray Linear Polyurethane Elite[®] 321 Brushing Polyurethane. Polyurethane Undercoat Epoxy Primer All Altex Antifoulings (see note above)

PRECAUTIONS

For DIY & Professional Use: Read and follow all the caution statements on this Product Data Sheet, the product label and the Safety Data Sheet (SDS) for health and safety information prior to use. Altex Epoxy Barrier Undercoat is flammable. Keep away from heat, sparks and open flame. Use with adequate ventilation. May cause eye and skin irritation. Do not breathe vapour or spray. Wear suitable protective clothing such as gloves and eye and face protection.

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