

September 2013 This data sheet supersedes all previous issues

Always use correct Personal Protective Equipment

DUREPOX HI SOLIDS PRIMER TDS

Description

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Durepox Hi Solids Primer is a unique highly pigmented free sanding 2-pack epoxy urethane primer formulated for the Marine market as a high build primer.

Durepox Hi Solids Primer completes the Durepox family of products as the product of choice for the competition marine market such as America's Cup racing and many other domestic and international regattas.

Durepox Hi Solids Primer Features:

- Excellent adhesion to a variety of substrates.
- Excellent Filling properties.
- Long term hold out.
- · Excellent sag resistance.
- Stable solid substrate for many 2K topcoats.
- Good resistance properties.
- · Easy application
- Easy sanding

Limitations: Durepox Hi Solids Primer is not recommended as a finishing top coat.

Always test your chosen 2K topcoat for compatibility to Durepox as a substrate.

MAF Approved - Refer MQ1, Dairy approval. Regulatory Authority manual 15 for meat, fish, game and poultry, all areas.

Products



Product Type: Modified Epoxy Urethane.

Colour: White only.

Pot Life: 45 min with Durepox Hardener & reducer at 20°C.

Faster reducers and accelerators will shorten the pot life.

Induction Time: N/A
Density: 1.520

Recommended DFT: 95 microns DFT

Theoretical Coverage: 5m²/L @ 95 Microns DFT. Application equipment dependent.



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Properties

VOC: 465gms/lt Volume Solids: 47.1%

Dry Time @ 20°C: Touch Dry: 1 Hour

Handle: 12 Hours Sanding: 24 hours

Recoat-ability Self recoat @ 20°C: between 1 and 48 hours. (After 48 hours,

primer must be sanded to ensure inter-coat adhesion).

Topcoat: Between 2 hours and 24 hours, or any time after sanding.

Note: Lower temperatures will slow drying times.

Substrates



Durepox Hi Solids Primer can be applied over correctly prepared:

- · Aged and fully cured 2 K finishes.
- · Carbon Fibre.
- G.R.P. (Fibreglass)
- Wood and MDF Board Composites.
- Polyester body fillers.
- · Faring compounds.
- Suitably prepared Steel.
- Galvanised steel (after 81A 2-Pack Etch Primer)
- Suitably prepared Aluminium (after 81A 2-Pack Etch Primer)
- · Ideal isolator and sealer over aged enamels and difficult substrates.

Surface Preparation



Carbon Fibre & G.R.P (Fibreglass):

Wash with warm detergent solution e.g. C-Power solution. Degrease with Wax & Grease Remover. Abrade with 120-180 grit dry paper. Remove dust and wipe clean with Wax & Grease Remover. Apply Durepox Hi Solids Primer, sand and re-prime if necessary.

Wood and MDF Board Composites:

Clean all timber surfaces to be coated after final sanding. Strongly advise testing a small area for coating success due to the amount of variables in veneers & timbers.

Ensure substrates are dirt, dust & grease free. Depending on the particular wood substrate most can be coated on day one, left for overnight drying in warm temperatures (at least 20°C) followed by final sanding of 320 grit detail dry sand and recoated the following day.

Inspect for acceptable finish desired followed by top coating.

Aged & fully cured 2K Finishes:

Wash with C-Power diluted 20 parts clean water to 1 part C-Power. Degrease with Wax & Grease Remover. Abrade with suitable grit abrasive paper and ensure surface is completely dry and dust free. Apply Durepox Hi Solids Primer.



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Surface Preparation continued



Steel:

Degrease thoroughly with Wax & Grease Remover, sand to eliminate all rust or corrosion and treat with Rustkill (refer data sheet). Wipe surface clean with Wax and Grease Remover. Millscale must be removed from all ferrous metal substrates by power tool or alternatively with heavy steel, abrasive blasted with Garnett grade C to class 2.5 to deeper than 30 micron profile. The substrate should be clean white metal with no rust, millscale, welding flux or any other surface contaminates. This exposed blasted surface should be kept in dry conditions and must not come into contact with any contaminates such as open or uncovered hands, the use of approved gloves are highly recommended. For best results this surface should have Durepox Hi Solids Primer applied as soon as practical or within the working day in a controlled environment such as a heated spray booth.

Ensure you have correct Dry Film Thickness of 95 microns above any blast profile or risk flash rust appearance due to exposed peeks of blast profile and eventual coating failure.

Aluminium / After cleaning pre-treatment and etch priming:

Aluminium should be detail solvent cleaned with RALI Wax & Grease remover to remove all traces of dirt and oils. Work in manageable areas using the wipe on wipe off method changing clean cloths regularly and also wearing gloves. The use of RALI Break also works well. After solvent cleaning two methods are available for providing excellent adhesion to aluminium when applying Durepox Hi Solids Primer.

Abrade the Aluminium for a mechanical key followed by a further solvent clean then treat the area with Hydrafos, rinse off followed by complete drying of the surface.

The use of Henkel Alodine 1200 as per Henkel TDS followed by rinsing off with DI water. Alodine 1200R as a pre-treatment and adhesion promoter also works very well.

The use of RALI 81A Etch Primer as per TDS sheet.

To lightly grit blast with Garnett Grade C is also ideal for direct etch priming.

Galvanised Steel:

Degrease with Wax & Grease Remover. Mechanically abrade to remove rust and corrosion. Treat with Hydrafos acid wash as per TDS. Rinse with clean water. Apply 81A 2-Pack Etch Primer within 20 minutes of surface preparation. Allow a minimum of a 3 hours flash time (24 hour maximum) before applying Durepox Hi Solids Primer.

Directions For Use



Mixing Ratio:

4 parts Durepox Hi Solids Primer (By volume) to 1 part Durepox

Hardener.

Thinning:

Up to 20 – 40% 400, or 400 Slow Reducer.



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Spray Equipment



Compliant / Conventional suction and gravity feed spray guns.

Tip Size: 1.8 - 2 mm

Spray pressure: 275-380KPA (40-55 psi)

Number of coats: 2 coats (5-10 minutes flash between coats)

Although Durepox Hi Solids Primer can be applied without reducer, best results are obtained by thinning up to 20% by volume with 400 or 400 Slow Reducer. This allows for different gun setups and techniques, and assists flow and levelling.

Durepox Hi Solids Primer can also be applied with Air assisted airless and electrostatic spraying equipment. Consult your equipment manufacturer for set up guidelines.

Durepox Hi Solids Primer can also be applied by brush and roller using a 4:1 Durepox Hardener and 0 - 5% by volume mixing ratio with 400 or 400 Slow Reducer.

Remarks: Do not use activated material beyond pot life time or by reducing it further to get the viscosity down again. This procedure results in poor flow and adhesion failures.

Do NOT exceed recommended film thickness to avoid film defects, poor film through cure and poor adhesion.

Respect mixing ratios, drying times, spray pressure and DFT to avoid poor sandability and filling.

Activated material should not be returned to original can of non-activated material.

Close can of activator tightly immediately after use, as this product will react with humid air and water and lose its hardening effect.

For flexible systems, see specific TDS.

Health & Safety



For detailed information refer to the Safety data Sheets (SDS). Mixed product contains isocyanates. Inhalation of vapours or dust from sanding may cause respiratory sensitization. Splashes to eyes will cause irritation. Contact with skin may cause irritation. Applicators should use protective clothing and respiratory equipment. Product is flammable. Use and store away from heat and ignition sources.

Transport &



Hazchem:

4L

Storage Dan UN:

3A

1263 3(Y)

Packing Group: Shipment name:

III

Flash point:

PAINT Flammable Liquid