

July 2013

This data sheet supersedes all previous issues

Always use correct Personal Protective Equipment

DUREPOX PRIMER Marine TDS

Description



Durepox 2K Primer is a unique highly pigmented free sanding 2-pack epoxy urethane primer formulated for the Marine market as a primer and also as a topcoat for racing yachts in particular.

Durepox 2K Primer is the product of choice for the competition marine market such as America's Cup racing and many other domestic and international regattas.

Durepox 2K Primer Features:

- Product performs fantastic in conjunction with Durepox High Performance Clear.
- Excellent adhesion to a variety of substrates.
- Excellent Filling properties.
- Long term hold out.
- Variety of factory packed colours.
- Tintable for custom colours.
- Stable solid substrate for many 2K topcoats.

Limitations: Durepox 2K Primer <u>is not</u> recommended as a finishing top coat for the domestic pleasure craft market above or below the water line for permanently moored or exposed to the weather.

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: Factory packed: White, Black, Grey, Bright Red, and Blue.

Personal colours available on request with lead time.

Pot Life: 45 min with DUREPOX Hardener & 400 Slow Reducer at 20°C

Faster reducers and accelerators will shorten pot life.

Induction Time: N/A

Density: 1.331 kg/L **Recommended DFT:** 50 Microns

Theoretical Coverage: 9m²/L @ 50 Microns D.F.T. Application equipment dependant.



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Properties



VOC: 523 g/L

Volume Solids: 37.82% (White)

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

must be sanded to ensure intercoat adhesion)

Topcoat: between 2 hours and 36 hours, then any time after

sanding.

Dry Time @ 20°C: Touch Dry: 1 Hour

Handle: 12 Hours Sandable: 24 Hours

Substrates



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 2K 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 2K Primer.



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Steel:

Surface Preparation (Cont)



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. Milscale 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, mill scale, 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 2K 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 50 microns above any blast profile or risk rash 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 2K 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.
- 2. 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. Allow to dry for the recommended time and apply Durepox.

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 2K Primer.

Directions For

Strain mixed product prior to application



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Use

Mixing Ratio: 4 parts Durepox 2K Primer (Volume)

1 part Durepox Hardener

Thinning: Up to 20% 400 or 400 Slow Reducer

Note

Lower temperatures will slow drying; adding of up to 5% by volume of RALI 62C Accelerator will approximately halve curing and pot life times. Reduce addition to 1-2% when drying with IR lamps. Misuse of 62C Accelerator can cause loss of adhesion and poor flow-out. High temperatures can accelerate drying time and reduce pot life; the use of 400 Slow Reducer can help in these circumstances. Always be mindful of recoat times in warm conditions as in over 25 deg C.

Spray Compliant / Conventional suction and gravity feed spray guns.

Equipment: Tip Size: 1.5 - 2 mm

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

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

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Although Durepox 2K 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 set-ups and techniques, and assists flow and levelling.

Durepox 2K Primer can also be applied with Air assisted airless and electrostatic spraying equipment. Consult your equipment manufacturer for set up guidelines.

Brush and Roller: 4:1 Durepox Hardener and 0 – 5% 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.

Health & Safety



For detailed information refer to Safety Data Sheet (SDS). Mixed product contains isocyanates. Inhalation of vapours or dust from sanding may cause respiratory sensitisation. 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 &

Storage

Sizes: 1L, 4L, 20L

Dangerous Goods: 3A
UN: 1263
Hazchem: 3[Y]
Packing Group: III

Shipment name: PAINT Flammable

Flash point: 27°C