

July 2013

This data sheet supersedes all previous issues

Always use correct Personal Protective Equipment

DUREPOX PRIMER

Description



A unique highly pigmented free sanding 2-pack epoxy urethane primer formulated for the Automotive Refinish, Marine, Industrial and Aircraft industries. One of the great features of this two-pack product is its remarkable flexibility and adhesion to bare metal. As a 'top of the range primer', Durepox 2K Primer not only provides a workable stable base onto which two-pack systems may be confidently applied but is also excellent for preparing a solid foundation for top quality Alkyd, and Acrylic Lacquer finishes.

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, Black, Grey, Light Grey, (special colours on request) **Pot Life:** 45 min with DUREPOX Hardener & 400 Slow Reducer at 20°C

Faster reducers will shorten pot life.

Induction Time:5 MinutesDensity:1.331 kg/LRecommended DFT:50 Microns

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

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, except lacquers which should be applied after Durepox 2K Primer has cured for at least 36 hours and dry sanded as application of many coats of products containing high proportions of solvents can cause uncured 2K products to react.

Dry Time @ 20°C: Touch Dry: 1 Hour

Handle: 12 Hours Sandable: 24 Hours

Substrates





Substrates

- Aged and fully cured Automotive finishes including Acrylic Lacquers and clear over base systems
- Steel
- Galvanised steel (after 81A 2-Pack Etch Primer)
- Wood and MDF Board Composites



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(cont)



- Aluminium after detailed cleaning and the correct use 81A 2-Pack Etch Primer
- G.R.P. (Fibreglass)
- Concrete
- Polyester body fillers
- Ideal isolator and sealer over aged enamels and difficult substrates.
- Carbon Fibre.
- Plastic bumpers, for best practice test a small area first.

Surface Preparation



Old 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.

Steel:

Degrease thoroughly with Wax & Grease Remover, sand to eliminate all rust or corrosion and treat with Rustkill (refer data sheet). 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 Truck Clean also works well. After solvent cleaning, two methods are available for providing excellent adhesion to aluminium when applying Durepox.

Abrade the Aluminium for a mechanical key with P150 / 180 grit by hand or machine followed by a further solvent clean then treat the area with Hydrafos, rinse off followed by complete drying of the surface.

- 1. 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.

Surface

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



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Preparation (Cont)

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. Rinse with clean water. Immediately wipe surface clean with GP Thinners. 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.

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.

Plastic Bumpers & Carbon Fibre:

Clean thoroughly with Wax & Grease Remover. Sand with 320 grit abrasive paper. Remove dust and wipe clean with Wax & Grease Remover. Apply one full coat of Durepox 2K Primer.

Types of plastic vary, so adhesion should be tested prior to top coating.

Concrete:

Treat with Hydrafos-acid wash (refer Data Sheet) or abrasive blast new concrete. Ensure surface is dry and free from dirt, grease and oil deposits. When Durepox 2K Primer is to be used as a single coat finish on interior floors in workshops, garages etc, consult **RALI** Technical Staff for further advice.

Strongly advise testing a small area for coating success due to the amount of variables in concrete and release agents for tilt slab walls & floors. Acid etch or abrasive blast new or aged concrete. Ensure it is dry and free from dirt, grease and oil deposits. Durepox can be applied directly to suitably prepared concrete directly. The use of Test Method D4263 is highly recommended for checking if moisture is still present in the concrete.

Directions For

Strain mixed product prior to application

Use

Mixing Ratio:

4 parts Durepox 2K Primer

(Volume) to 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 RALI 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.



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Spray

Compliant / Conventional suction and gravity feed spray guns.

Equipment:

Tip Size: 1.5 - 2 mm

>1/**4**

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

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

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.

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 &

Sizes: 1L, 4L, 20L



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

Shipment name: PAINT Flammable

Flash point: 27°C