





Durepox.eu

# **Durepox** has been coating high profile boats for over 20 years.



Durepox has revolutionised race boat painting. Applied wet-on-wet, and fast drying, Durepox can speed up boat painting considerably.

Experiments at Otago University have shown that high gloss surfaces perform poorly against the finish of Durepox where drag co-efficient was up to 15% lower.

Durepox is an epoxy urethane, which has amazing adhesion and can be applied wet on wet, and may be sanded within three hours. It is an excellent water barrier and shows superior weather ability.

Durepox is a unique highly pigmented, free sanding, two component epoxy urethane primer formulated for the Marine and Aircraft industries. One of the great features of this two component product is its remarkable flexibility and adhesion.

Durepox is a hugely popular and well known coating amongst yacht racers, it can be found on many race boats, including America's Cup, Ocean Race and many other high performance racing yachts.

Durepox can be used on the underwater hull, top sides, decks and rigging as it delivers outstanding adhesion, water resistance, weight savings and full colour options in one product system.

Independent testing has shown that Durepox reduces drag compared to most other standard marine finishes. Used by Emirates Team New Zealand and other syndicates competing in the America's Cup.







metals.

# USES/APLICATIONS



- Can be used on all ferrous and non-ferrous metals
- Can be used as a rust inhibitor primer
   Easy to apply by spray, brush or roll

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## **FEATURES**

- Great adhesion • Does not require sanding sealers

### PRODUCT - D6.101

DUREPOX ETCH PRIMER BASE

DUREPOX ETCH PRIMER CATALYST

### Mixing ratio (volume)

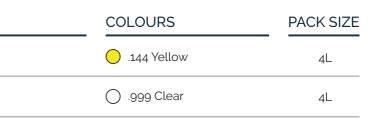




# An acid-cured vinyl-butyral/phenolic resin combinationetch primer suitable for use on all ferrous and non-ferrous



- No sanding required Can be overcoated with both one &
- two component products









# Durepox HIGH SOLIDS PRIMER



High build primer that can be used for fine fairing, based on free sanding two component epoxy urethane technology.



Durepox 2K PRIMER



A unique highly pigmented free sanding two component epoxy urethane primer.

## র্ন ক্র **USES/APLICATIONS** · Used as a high build primer Can be used over: Composite

(Carbon Fibre, GRP - Polyester & Epoxy), Steel, Aluminium, Wood & MDF

# **FEATURES**

- Excellent adhesion to a variety of substrates
- Excellent filling properties
- Long term hold out
- Excellent Sag Resistance
- · Easy application and sanding

# \$<u>7</u>; } **BENEFITS**

· Provides a stable base for many two component topcoats

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## USES/APLICATIONS

- Used as a High build, Primer and Top Coat
- Can be used over: Composite (Carbon Fibre, GRP - Polyester & MDF

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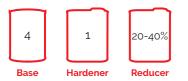
## **FEATURES**

- Epoxy), Steel, Aluminium, Wood &

- · Remarkable flexibility.
- · Great adhesion.
- Fast dry.
- It is an excellent water barrier and shows superior weather ability • Can be tinted to give a coloured
  - topcoat

PRODUCT - D6.103 COLOURS PACK SIZE 1L O .001 White DUREPOX HIGH SOLIDS PRIMER 4L

Mixing ratio (volume)



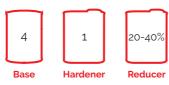


Details of hardener, reducer and accelerator on page "Ancillaries"



PRODUCT - D6.105	COLOURS	PACK SIZE
	.708 Black	1L
DUREPOX 2K PRIMER		4L
DUREPOX 2K PRIMER		1L
	.715 Grey	4L
	O .001 White	1L
DUREPOX 2K PRIMER		4L
DUREPOX 2K PRIMER	.144 Luminous Yellow	1L
DUREPOX 2K PRIMER	(RAL 1026)	4L
	.151 Luminous Orange (RAL 2005)	1L
DUREPOX 2K PRIMER		4L
	Custom colour	1L
DUREPOX 2K PRIMER - TINTED		4L

### Mixing ratio (volume)



Details of hardener, reducer and accelerator on page "Ancillaries"





## **BENEFITS**

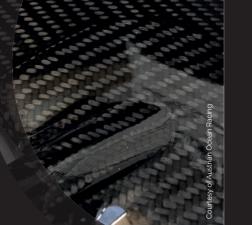
- · Saves layers of paint, reducing cost and weight, up to 20kgs on a 20m yacht
- Provides a stable base for single and two-component coating systems
- Available in a range of RAL or other industry standard colours



# Durepox HIGH PERFORMANCE CLEAR.



A two component epoxy urethane clear used as a clear coating for various substrates directly coated over Durepox 2K Primer.







A two component epoxy urethane clear coating. Optimised to provide increased UV, temperature and abrasion resistance.

# USES/APLICATIONS

- Can be used over Durepox Primer or bare substrates.
- Can be used over: Composite (Carbon Fibre, GRP - Polyester & Epoxy), Steel, Aluminium, Wood & MDF

# **FEATURES**

53

- Remarkable flexibility
- Great adhesion • Does not require sanding sealers
- Fast drying
- Easy to apply by spray, brush or roll
- It is an excellent water barrier and shows superior weather ability

# \$<u>7</u>; )) **BENEFITS**

- High film build & low in physical weight
- Extremely durable and hard wearing
- · Can be tinted to a range of RAL or
- other industry standard colours

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## USES/APLICATIONS

- Used on Foils, Rudders and Dagger boards for racing yachts
- Can be used over: Composite (Carbon Fibre, GRP - Polyester & Epoxy), Steel, Aluminium, Wood & MDF

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## **FEATURES**

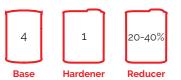
- substrates
- Excellent filling properties
- Can be tinted to give a coloured Topcoat

PRODUCT - D6.301	COLOURS	PACK SIZE	
	.000 Clear	1L	
DUREPOX HIGH PERFORMANCE	O .000 Clear	4L	
	Custom colour	1L	
DUREPOX HIGH PERFORMANCE - TINTED	Custom coloui	4L	

## PRODUCT - D6.303

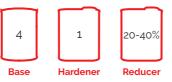
DUREPOX XTREME

### Mixing ratio (volume)



Details of hardener, reducer and accelerator on page "Ancillaries"

### Mixing ratio (volume)



Details of hardener, reducer and accelerator on page "Ancillaries"







· Excellent adhesion to a variety of

- Higher crosslink density giving tougher coating with superior slip and abrasion resistance
- Can be applied direct to many substrates

	COLOURS	PACK SIZE
.000 Clear	1L	
	O .000 Clear	4L



## **DUREPOX 2K HARDENER**



A clear colourless Aliphatic Polyisocyanate resin solution used as the hardener component for Durepox High Solids, 2K Primer, High Performance & Xtreme Clear. This hardener is designed to reduce critical recoat time, increase dry time and improve chemical resistance.

PRODUCT - D6.202	COLOURS	PACK SIZE
DUREPOX 2K HARDENER	O .000 Clear	0,25L 1L 5L

# DUREPOX REDUCER



Thinner for use with Durepox.

PRODUCT	COLOURS	PACK SIZE
	() .000 Clear	1L
DUREPOX REDUCER 400 NORMAL - D6.402		4L
	🔿 .000 Clear	1L
DUREPOX REDUCER 400 SLOW - D6.404	O .000 Clear	4L

## DUREPOX ACCELERATOR



62C Accelerator is an additive for Durepox products. Addition of up to 5% by volume of 62C Accelerator will approximately halve curing and pot life times.

PRODUCT - D6.602	COLOURS	PACK SIZE
DUREPOX ACCELERATOR 62C	🔘 .000 Clear	0,25L 1L

### PREPARATION

- Thoroughly clean the substrate using both water and solvent borne cleaning agents, prior to sanding. It is also advised to work in small areas, cleaning and rinsing the area frequently with clean water.
- Check for 'grease-free' cleanliness by wetting the surface with clean fresh water.
  - If no 'water-break' is observed, then the surface may be considered grease-free.
- · If a break is detected, re-wash and re-rinse as above. • Allow to dry.

### **BRUSH & ROLLER APPLICATION**

- Always wear recommended PPE (Personal Protective Equipment).
- · Always use a good quality 10mm mohair roller sleeve and or Nylon/Polyester brush, suitable for use with solvents, to obtain optimum results.
- Roll or brush out a section that can be comfortably worked on (bearing in mind the 3-5 minute wet-edge hold out time), being careful not to overload paint thickness particularly on the vertical.
- Always use R400 Slow Reducer for roller or brush application. The use of the 4:1:2 thinning ratio may be used in the final coat to aid the levelling or flow out.
- · Tip off the rolled or brushed paint with the wettedout brush to remove roller stipple, and brush marks. Always finish off with vertical strokes on large flat upright areas with a wetted-out brush. Continue with rolling or brushing as quickly as possible in order to retain the applied paints wet edge.
- · For large surface areas, it would be advisable to paint as a two-person team, one rolling or brushing with the other tipping off immediately behind.
- Normally 2-3 coats are required to obtain the required film build, keeping in mind that a final sand before polishing may be required. Once again this is relevant to the condition of the substrate.
- Depending on film build obtained, leave to cure for 1-2 hours between coats. 2 hours would be the maximum time allowable before sanding between coats when normal film build has been obtained.
- · Lightly sand with P600 grit paper to de-nib and degloss between coats.
- Clean area thoroughly as previously described before applying additional coats. It is advisable to test an area first when cleaning with solvent borne cleaners to prevent any unnecessary marking of the surface.
- · Re-apply Durepox Clear as described above to obtain a desirable finish.
- · Once completed, leave to cure overnight. Sand and polish if required.



### SANDING

- Sand by hand or machine using P240- P400. The grade of sandpaper used will be relevant to the condition of the substrate.
- Dust off area thoroughly.
- · Clean area with suitable degreaser.
  - · Always use the two-rag method. ie. One on, one off, changing rags often.
- · Clean area with tack rag ready for painting.



### TIPS

- Always wear recommended PPE (Personal Protective Equipment).
- Ensure thorough cleaning/degreasing has been performed prior to each coating stage, as this has a direct effect upon coating adhesion.
- Ensure all surfaces are clean and dry prior to coating.
- Follow product TDS where applicable.
- Read and follow all safety information on the TDS before starting.
- Always keep your brush or roller lubricated with fresh paint.
- · Do not apply upon surfaces in direct sunlight.
- Weather conditions are vital to the overall look of the finished job:
- Minimum ambient temperature 8°C
- Maximum ambient temperature 30°C
- Maximum relative humidity 85%
- · If in doubt always contact your local supplier of products.

Durepox SYSTEM GUIDE

	If carrying out large repaint work in a r	on controlled environment Do not apply paint if relative hu	imidity is above	e 85% or temperature is within 3 deg C of Dew Point	being the MPT or Minimum Paint Temperature.
SUBSTRATE	PREPARATION	ETCH PRIMER		PRIMER/FILLER	COLOUR
Composite: Carbon Fibre and GRP (Polyester and Epoxy)	<ol> <li>Remove all mould release agents.</li> <li>Abrade with P150 / P180 Grit by hand or machine or garnet blast.</li> <li>Fill and shape if required.</li> <li>Air blow and clean down always wearing gloves &amp; lint free cloths.</li> </ol>			<ol> <li>Apply 2 coats of Durepox High Solids Primer or 2K Primer</li> <li>Fill pinholes by squeegee or brush over as seen.</li> <li>Cure for 24 hr 20 deg C.</li> </ol>	
Steel Heavy / Light	<ul> <li>Heavy Steel:</li> <li>1. Degrease the surface.</li> <li>2. Grit Blast to SA2.5 with Garnett Grade C to 30 micron profile.</li> <li>Light Gauge Steel With No Milscale:</li> <li>1. Degrease the surface.</li> <li>2. Abrade with suitable abrasive such as P150 / P180 grit.</li> <li>3. Preheat steel is always good practice.</li> <li>Air blow and clean down always wearing gloves &amp; lint free cloths.</li> </ul>	1. Not applicable for steel with Milscale removed followed by grit blasting.		<ol> <li>Apply Durepox 2K Primer.</li> <li>Take note of substrate profile and required wet &amp; dry film build.</li> <li>Good practice is 50 microns DFT of Durepox above the peeks of a recommended 30 micron Garnett blast profile.</li> </ol>	<ol> <li>Sand after full cure.</li> <li>Finish with P400.</li> <li>Coloured Durepox 2K Primer or Boero Challenger Pro, Boero Challen</li> </ol>
Galvanised Steel	<ul> <li>Heavy Steel Galv / Light Steel Galv:</li> <li>1. Degrease the surface.</li> <li>2. Preheat steel is always good practice.</li> <li>Air blow and clean down always wearing gloves &amp; lint free cloths.</li> </ul>	1. Use Durepox Etch primer.		1. Apply Durepox 2K Primer.	Pro Basecoat (solid or Special effect) Challenger Pro Clear.
Aluminium	<ul> <li>After Cleaning &amp; Degreasing</li> <li>1. Abrade with P150 / P180 Grit by hand or machine.</li> <li>2. Solvent clean then treat with Hydrafos. Rinse with water / immediately wipe surface dry changing cloths frequently.</li> <li>3. Preheat Aluminium is always good practice.</li> <li>Air blow and clean down always wearing gloves &amp; lint free cloths.</li> </ul>	<ol> <li>Ose Durepox Etch primer.</li> <li>Allow min 3hr to dry.</li> </ol>		2. Take note of substrate profile and required wet & dry film build.	
Wood / MDF	<ul> <li>MDF</li> <li>1. Sand smooth / Finish sand with P240 / P320 grit including edges.</li> <li>Timbers with Grain</li> <li>1. Sand smooth / Finish sand with P240 / P320 grit in the direction of the grain. Sand edges.</li> <li>Air blow and clean down always wearing gloves &amp; lint free cloths.</li> </ul>			MDF & Grain Timbers 1. Depending on desired finish timbers with grain can be directly topcoated with Durepox High Performance Clear.	<ul> <li>MDF &amp; Grain Timber (if colour is required)</li> <li>1. Sand after full cure.</li> <li>2. Finish with P400.</li> <li>3. Coloured Durepox 2K Primer or Boero Challenger Pro, Boero Challen Pro Basecoat (solid or Special effect) Challenger Pro Clear.</li> </ul>

Durepox 2K primer is a very unique two component epoxy Urethane that can be applied by brush, roller, airless, air assisted airless, electrostatic and conventional gravity or pressure pot spray. Durepox has many applications from hi build primers to being used as coloured topcoats in conjunction with Durepox High Performance Clear (DHPC). Other 2K topcoats can be applied over Durepox after full cure and sanding, test an area first before completing entire project.

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