





Durepox.eu

# **Durepox** has been coating high profile boats for over 25 years.



Durepox is a hugely versatile coating that has been used extensively worldwide on marine craft like Americas Cup, Sail GP, and Maxi racing yachts. Perfected for carbon fibre, its uses in the industry are varied and wide Emirates Team NZ have used Durepox on all their boats for over 25 years. In the 37<sup>th</sup> Americas Cup, the AC40 one design foiling yachts have all been painted with Durepox from manufacture.

Durepox can be used on all surfaces of carbon craft including the underwater hull, top sides, decks and rigging, delivering outstanding adhesion, water resistance, weight savings and full colour options, all in one product system. Independent testing has shown that Durepox can reduce drag by up to 15%, compared to most other finishes.

#### Why use Durepox?

Durepox provides a very light and durable system of primer/ sealer and topcoat, and combined with Resene's world leading colourants, deliver strong, durable and UV stable custom colour finishes. Often used as a topcoat on racing boats for the excellent water barrier properties and exceptional weather stability. On a practical level, painters value its fast drying, high build properties and quick repair.

#### Why is Durepox more durable?

It is a unique epoxy urethane, which means it combines high-tensile strength and compatibility with flexible materials needed in marine environments. It has incredible adhesion to carbon fibre, fibreglass and many other substrates.

#### What makes it so light?

Durepox can be used as a filler, primer and topcoat all in one, saving litres of paint and hence kilograms – making yachts lighter and therefore faster.

#### Other Uses

Durepox is a very versatile product, and is often used on substrates such as Steel, Galvanised Iron, Aluminium, Fibreglass, Wood and MDF substrates and Concrete and cementitious products due to its unique and incredible adhesion capabilities.

As a "one product" or "Direct to Substrate" primer/sealer/ topcoat system, it provides unparalleled ease and simplicity for applicators, with the trust that comes from decades of use in some of the toughest conditions for protective coatings.







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



PRODUCT - D6.101	COLOURS	PACK SIZE
DUREPOX ETCH PRIMER BASE	.144 Yellow	4L
DUREPOX ETCH PRIMER CATALYST	) .999 Clear	4L

Mixing ratio (volume)











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



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#### 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



• Provides a stable base for many two component topcoats

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

#### Mixing ratio (volume)











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





USES/APLICATIONS

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



#### FEATURES

- 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

# 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

PRODUCT - D6.105	COLOURS	PACK SIZE
		1L
DUREPOX 2K PRIMER	./08 Black	4L
		1L
DUREPOX 2K PRIMER	./15 Grey	4L
		1L
DUREPOX 2K PRIMER	U.U.U.U.U.U.U.U.U.U.U.U.U.U.U.U.U.U.U.	4L
	144 Luminous Yellow	1L
DOREPOX 2K PRIMER	(close to RAL 1026)	4L
	.151 Luminous Orange	1L
DUREPOX 2K PRIMER	(close to RAL 2005)	4L
		1L
DUREPUX 2K PRIMER - TINTED		4L

#### Mixing ratio (volume)







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





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

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



- 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

PRODUCT - D6.301	COLOURS	PACK SIZE
		1L
DUREPOX HIGH PERFORMANCE		4L
	Custom colour	1L
		4L

#### Mixing ratio (volume)











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





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



#### FEATURES

- Excellent adhesion to a variety of substrates
- $\boldsymbol{\cdot}$  Excellent filling properties
- Can be tinted to give a coloured Topcoat



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

PRODUCT - D6.303	COLOURS	PACK SIZE
		1L
	0 .000 Cledi	4L

#### Mixing ratio (volume)







# ANCILLARIES

## 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
		0,25L
DUREPOX 2K HARDENER	🔘 .000 Clear	1L
		5L

### DUREPOX REDUCER



Thinner for use with Durepox.

PRODUCT	COLOURS	PACK SIZE
		1L
DUREPOX REDUCER 400 NORMAL - D6.402	O .000 Clear	4L
		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	O .000 Clear	0,25L 1L

# **BRUSHING DUREPOX PRODUCTS**

#### 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.





- 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 non controlled environment Do not apply paint if relative humidity

SUBSTRATE	PREPARATION	ETCH PRIMER	
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>		
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> </ul>	1. Not applicable for steel with Milscale removed followed by grit blasting.	
	<ol> <li>Abrade with suitable abrasive such as P150 / P180 grit.</li> <li>Preheat steel is always good practice.</li> <li>Air blow and clean down always wearing gloves &amp; lint free cloths.</li> </ol>		
Galvanised Steel	Heavy Steel Galv / Light Steel Galv: 1. Degrease the surface. 2. Preheat steel is always good practice. Air blow and clean down always wearing gloves & lint		
	free cloths.	1. Use Durepox Etch primer.	
Aluminium	After Cleaning & Degreasing 1. Abrade with P150 / P180 by hand or machine. Air blow and clean down, always wearing gloves and	2. Allow min 3hr to dry.	
	using lint free cloths Preheat Aluminium is always good practice		
	MDF 1. Sand smooth / Finish sand with P240 / P320 grit including edges. Timbers with Grain		
Wood / MDF	<ol> <li>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> </ol>		

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.

is above 85% or temperature is within 3 deg C of Dew Point being the MPT or Minimum Paint Temperature.

PRIMER/FILLER	COLOUR	CLEARCOAT
<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>		
<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 Challenger</li> </ol>	
<ol> <li>Apply Durepox 2K Primer.</li> <li>Take note of substrate profile and required wet &amp; dry film build.</li> </ol>	Pro Basecoat (solid or Special effect) & Challenger Pro Clear.	1. Durepox High Performance Clear or Boero Challenger Pro Clear
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 Challenger Pro Basecoat (solid or Special effect) &amp; Challenger Pro Clear.</li> </ul>	

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# European distributor of







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