

# Technical Data Sheet

July 2013

This data sheet supersedes all previous issues

**Always use correct Personal Protective Equipment** 

# DUREPOX HIGH PERFORMANCE CLEAR Marine TDS

### Description

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Durepox High Performance Clear is a unique 2-pack epoxy urethane clear formulated for the Marine market as a direct to substrate clear or in conjunction with Durepox 2K Primer.

Durepox High Performance Clear is extensively used in the general marine and racing yacht market in particular. Also the product of choice for the competition marine market such as America's Cup racing and many other domestic and international regattas.

### **Durepox High Performance Clear Features:**

- Used with Durepox 2K primer as a topcoat or mixed in during the last coat application.
- Excellent adhesion to a variety of substrates.
- UV Stable.
- Excellent Filling properties & gloss level.
- Long term hold out.

**Limitations:** Durepox High Performance Clear **is not** recommended for the domestic pleasure craft market above or below the water line for permanently moored or exposed to the weather.

Best practice is to always test a small area to confirm substrate compatibility and desired finish.

**Products** 



**Product Type:** Epoxy Urethane Clear

**Colour:** Slightly Yellow Tone with a full 4L can.

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

**Induction Time**: 5-10 Minutes **Density:** 0.95-1.00 kg/L.

**Recommended DFT:** 25-35 microns DFT PER COAT **Theoretical Coverage:** 10m<sup>2</sup>/L @ 40 Microns DFT

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**Properties** 



**VOC:** 515 g/L

Volume Solids: 41% (non catalysed)

Dry Time @ 20°C: 2hr detail sand and recoat.

Touch Dry: 1 Hour Handle: 12 Hours

**Recoat-ability** Self recoat @ 20°C: between 0 and 2 hours. After 2 hours must be

detail sanded to ensure intercoat adhesion. Like most 2 pack products the higher the temperature the shorter the pot life.

#### **Substrates**



Durepox High Performance Clear can be applied over pigmented Durepox Primer or directly over correctly prepared:

- G.R.P. (Fibreglass)
- Carbon Fibre.
- Pigmented Durepox.
- Veneer coated ply wood & most wood finishes.

#### Note:

#### Satin Finishes:

It is possible to reduce the gloss of Durepox High Performance Clear to a satin finish of 35% gloss with the addition of 2% by weight of AF41 matting powder (Available to be shaken in from RALI Auckland, Christchurch and Wellington sites). Highly recommend a test sample to be done first, judge gloss level after 48 hr for an accurate indication of gloss level.

## Surface Preparation



### **Carbon Fibre:**

Wash with warm detergent solution e.g. C-Power solution. Degrease with Wax & Grease Remover. Abrade with 120-180 grit dry sandpaper, finish with P400. Remove dust and wipe clean with Wax & Grease Remover and or IPA spirit wipe. Apply Durepox High Performance Clear.

After full cure sand and recoat if necessary for desired finish.

#### **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 P400 grit detail dry sand and recoated the following day.

After full cure sand and recoat if necessary for desired finish.

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**Directions** For Use

**Mixing Ratio:** 4 parts Durepox HP Clear

(Volume) to 1 part Durepox Hardener

Thinning: Up to 20 - 40% 400, 909 Fast 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% RALI 62C Accelerator 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 Equipment: Compliant / Conventional suction and gravity feed guns.

Tip Size: 1.5 - 2 mm

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

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

Air less / Air assisted airless & electrostatic follow equipment manufacturer's

recommendations.

Although Durepox High Performance Clear can be applied without thinning, best results are obtained by thinning up to 20% by volume with 400, 909 Fast or 400 Slow Reducer. This allows for different gun set-ups and techniques, and assists flow and levelling.

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. Large surface areas in conjunction with temperatures +20°C it is highly recommended to use 400 Slow Reducer. Plan the job required and seek advice if unsure.

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



4L Sizes: **Dangerous Goods:** 3A

UN: 1263 Hazchem: 3[Y] **Packing Group:** Ш

Shipment name: PAINT Flammable Liquid Low Flash Point

Flash point: 27°C

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