TECHNICAL DATA SHEET

CLEARPOX

Colourless UV Stabilized Epoxy Resin Casting System
80 – 85 Shore D Hardness

CLEARPOX is a fast curing colourless epoxy resin designed especially for use in variety of applications such as Bar tops, Counter tops, Furniture and other decorative projects that require a strong, durable coating. CLEARPOX is low in colour and high in UV resistance. CLEARPOX has excellent water resistance, chemical resistance, mechanical properties with excellent adhesion to a variety of substrates.

KEY FEATURES

- Clear and UV Resistant
- Cast from 1mm to 20mm thickness Fast curing
- Low viscosity, easy to apply
- Low tendency to yellow on exposure to UV Excellent mechanical properties
- Excellent chemical and water resistance Excellent adhesion

MIX RATIO

	Part A RESIN:	Part B HARDENER
By Volume:	100:	50:

PRODUCT DATA

Property	Units	Cleartop 5 Resin	Cleartop 5 Hardener	Mix
Material	-	Epoxy Resin	Formulated Amine	-
Appearance	-	Colourless Liquid	Colourless Liquid	Colourless Liquid
Viscosity (25°C)	mPa.s	1700-2100	200-300	600-900
Density (25°C)	g/cm³	1.14 - 1.18	1.01 - 1.05	1.09 - 1.13

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WORKING TIME AND CURE SPEED

Property	Units	Typical Value
Pot Life (200g, 25°C)	Minutes	25 - 30
Cure Time (200g, 25°C)	Hours	24
Full Cure (25°C)	Days	7
Minimum Curing Temperature	°C	15

CURED PROPERTIES

Properties	Standard	Units	Result (Post Cure)
Hardness	BS EN ISO 868	Shore D	80 - 85
Tensile Strength	BS EN ISO 527	MPa	61.0 - 66.0
Elongation at Break	BS EN ISO 527	%	4.0 - 6.0
Tensile Modulus	BS EN ISO 527		1600 - 1900
Flexural Strength	BS EN ISO 178	MPa	75.0 - 80.0
Flexural Modulus	BS EN ISO 178	MPa	2050 - 2350
Glass Transition Temperature (Tg)	DMA	°C	60 - 65

METHOD OF USE

Preparation

Prior to use, ensure that the resin is compatible with the substrates, reinforcements or fillers being used. Do not apply resin if the ambient or substrate temperature is less than minimum curing temperature, see “Working Time and Cure Speed” section.

Mixing and Application

Thoroughly mix the resin and the hardener according to the indicated mixing ratio,
Avoiding air entrapment and make certain that the material at the bottom and sides of the

container is well stirred into the centre. Vacuuming the mixed material will help produce a void free cured material. The two components should be mixed and applied within the pot life.

Cure and Post Cure

The system is designed to be used and cured at room temperature. Lower ambient Temperatures will result in slower cure. The product should always be processed and cured at temperatures above the minimum curing temperature, see "*Working Time and Cure Speed*" section. It is not necessary, but if desired, a step wise post cure treatment can be used to maximise cured properties. Allow the product to cure at room temperature for at least 24 hours, then heat to 40°C for 1 hour, followed by 60°C for 1 hour, followed by 80°C for 3 hours. To prevent any distortion during the post cure cycle, the part should be placed on a conformer. When post-curing is complete, let the unit cool down slowly to room temperature, preferably in the oven. Sudden change in temperature can cause distortion or warping.

Storage

Clearpox should be stored in original, unopened containers between 15 and 25°C.

If stored under the above conditions Clearpox will have a shelf life of 12 months.

Further Information

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

Our technical advice, whether verbal, or in writing is given in good faith, but without Warranty – this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended process and use.

Before using any of our products, users should familiarise themselves with the relevant Technical and SDS provided by Almark Australia Pty Ltd.