

Technical Data Sheet ELPR170-TB Revision Date: 1/31/2022

PRODUCT CODE: ELPR170-TB

NAME: Envirothane 170-TB Tannin Blocking White Primer

**DESCRIPTION:** ELPR170-TB Water based primer provides an excellent foundation for any solid colour

systems on MDF as either a 1K or 2K product. When using PR170-TB on veneer, solid wood or in a refinish situation it is necessary to use the product as a 2K system by adding ELCAT100 Hardener to improve adhesion and prevent cracking. Based on a

urethane resin system, this high-hide primer lays down very flat and provides

unsurpassed filling properties especially for MDF, where it does not swell the fibres like other water based products in the market. It offers all the same properties as our

ELPR170 with the addtion of a tannin blocking additive.

**USES:** This product is designed for interior wood finishing applications such as cabinetry,

tables, furniture and millwork.

SANDING: MDF substrate should be sanded with at least 180 grit (preferably 320 for any routed-

out areas) or finer sandpaper prior to applying primer. Sand primer with 320 grit sandpaper or fine sponges. Two coats can be applied same day back-to-back without

sanding between and still acheive good adhesion.

RECOMMENDED APPLICATION:

Spray type: Air Assist Airless
Fluid Pressure: 500-700 PSI
Air Pressure: 25 PSI (triggered)
Tips: 06, 09 or 12

Spray type: Airless

Fluid Pressure: 1200-2000 PSI

Tips: 310, fine finish or ultra finish

Spray type: HVLP (Turbine)

Air Pressure: Max
Needle: 1.5-1.8

Reduction: 2-5% ELRX010

Spray type: Cup Gun (gravity)

Air Pressure: 40 PSI Tips: 1.8

Reduction: 2-5% ELRX010

Wet Film Build: 4-6 mils
Grams per 1/10 sq. metre: (250x400mm board) 16g - 24g

Number of Coats: 1-2 depending on desired look

Maximum Dry Film Build: 6 mils

Coating Temperature at Application: 20°C (68°F) or higher

\*for colder temperatures, add reducer (ELRX010) or warm material prior to spraying





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**PRODUCT** Reduction is not required if spraying through airless or air assist pump, but the product

PREPARATION: may be reduced up to 10% with water to improve application characeteristics depending

on the equipment used. Product should be at room temperature and mixed thoroughly

prior to use to ensure consistency.

**PHYSICAL** Specific Gravity: 1.5 ± 2%

PROPERTIES:Viscosity:2500cps @20°CSolids Content:70% by weight

Pot Life: None

Flash Point: None >75°C

VOC's: 54 g/L, 0.45 lb/gal VOC's (Less Exempt): 62 g/L, 0.51 lb/gal

**DRYING TIMES:** 

Air dry:Dry to Touch10 Minutes(20°C/68°F)Dry to Sand40-60 MinutesDry to Stack12 Hours

Note: Good gentle air movement (not a hurricane) with a recirculator or fan while parts are drying will reduce dry to sand times by 20-40% with reasonable humidity levels

(<65% r.h.). Lower temperatures or higher humidity will extend dry times.

Conventional Oven: Dry to Touch 5-10 Minutes (40-45°C/104-113°F) Dry to Sand 15-25 Minutes

Dry to Stack 1-3 Hours

Sun-Spot IR Cure: Flash off 1-2 Minutes

(Recommended) Direct Cure 5 Minutes @60-70°C (140-160°F)

Rack Cure (Indirect no probe mode) 10-15 Minutes @20%+ power

Cool Down 10-20 minutes

Product is dry to sand (or stack) after cooling

**TYPICAL SYSTEMS:** Note: Two coats of PR170-TB can be applied same day without sanding between.

**Refinish - Over Old Finishes** 

Substrate: Old Honey Oak with Pre-cat Lacquer Prep: Degrease, rinse and sand 180 grit

1 or 2 coats, ELPR170-TB White Primer with 2.5% - 5% by vol. ELCAT100 Hardener

Sand using 320 grit sandpaper or fine sponge

1 or 2 coats ELNYW200XX Envirothane 200 White Topcoat

New Finish - Solid Wood Frame with Veneer core

ELPR170-TB White Primer with 2.5% - 5% by vol. ELCAT100 Hardener

Sand using 320 grit sandpaper or fine sponge ELPR170-TB Envirothane 170-TB White Primer Sand using 320 grit sandpaper or fine sponge

1 or 2 coats ELNYW200XX Envirothane 200 White Topcoat





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TYPICAL SYSTEMS: Whites or Light Colours:

Substrate: MDF

ELPR170-TB, Envirothane 170-TB Tannin Blocking White Primer

Sand using 320 grit sandpaper or fine sponge

ELPR170-TB, Envirothane 170-TB Tannin Blocking White Primer

Sand using 320 grit sandpaper or fine sponge

1 or 2 coats ELNYW200XX Envirothane 200 White Topcoat

**Dark Colours:** 

Substrate: MDF

ELPR170-TB, Envirothane 170-TB + 5% 896-9901 Black (makes dark grey)

Sand using 320 grit sandpaper or fine sponge

ELPR170-TB, Envirothane 170-TB + 5% 896-9901 Black (makes dark grey)

Sand using 320 grit sandpaper or fine sponge

1 or 2 coats EL100XX or ELNYC300XX Envirothane 100 or 300 Series tinted to desired

colour

**CLEANING:** Flush all equipment with water until it runs clear. Built-up coating and deep cleaning

can be performed using ELRX110 EnviroKlean WB Cleaner. For best results cleaning tips, aircaps and unpainted parts use ELRX110 for one hour or 10-20 minutes in an Ultrasonic bath (max. temp. 50°C/120°F). Do not leave painted parts (i.e. spray guns)

in ELRX110 for more than 20 minutes.

GENERAL INFORMATION:

Use stainless steel (304/316) equipment for all water based products. When switching between solvent and water based products in the same spray equipment we suggest

the following:

From Solvent to Water: Wash with acetone, then wash with water. From Water to Solvent: Wash with water, then wash with acetone.

Keep containers closed when not in use and keep from freezing.

These products are designed for industrial use only. Please refer to the Safety Data

Sheet prior to use.

SHELF LIFE: 12 months in unopened containers

**STORAGE:** Store in a tightly closed container at room temperature (18-25°C/64-75°F) and protect

from direct sunlight and foreign material. Do not store at temperatures below 5°C/41°F.

Disclaimer: Every reasonable precaution is taken by the manufacturer in the manufacture of our products to ensure that they comply with our standards. The information given herein is correct to the best of our knowledge. Any suggestions made by us covering the use of our products are based on experience and/or tests believed to be reliable. However, because the use of any product of our manufacture is completely beyond our control, including for example, the method and conditions of application, no guarantee or warranty, expressed or implied, is made. Manufacturer's maximum liability shall be to replace such quantity of product determined by our laboratory to be defective. User shall determine the suitability of the product for his intended use and assumes all risk and liability in connection therewith.

