

PRODUCT CODE: ELPR170

NAME: Envirothane 170 White Primer High Solids

DESCRIPTION: ELPR170 is a universal urethane primer that provides an excellent foundation for any solid colour systems on MDF as either a 1K or 2K product. When using PR170 on veneer, solid wood or in a refinish situation it is necessary to use the product as a 2K system by adding CAT100-LV Hardener to improve adhesion and prevent cracking or checking of veneers and soft woods. This 70% solids high-hide primer lays down very flat and provides unsurpassed filling properties especially for MDF, where it does not swell the fibers like other water based products in the market. It offers fast dry times and is easy to sand without being easy to sand through.

USES: This product is designed for interior wood finishing applications such as cabinetry, tables, furniture and millwork.

PRODUCT PREPARATION: Reduction is not required when spraying with Air Assisted Airless or Airless, however, adding 3% RX010 reducer will help the product to lay down extremely flat reducing the amount of sanding required to level sand prior to top coating. Reduction is recommended for pressure pots, HVLP turbine, conventional cup guns or brush and roll. Product should be at room temperature and mixed thoroughly prior to application. Drill mix any soft settling off the bottom of a can is recommended.

**CATALYST RATIOS
USING CAT100-LV
HARDENER**

ELPR170

(approx. 2 hr pot life @~5%)
(approx. 4 hr pot life @~2.5%)

by weight 5%

1.2kg (1 can) per 22.7kg (4 GA) pail
300g (1/4 can) per 5.65kg (1 GA)

by volume 5%

1060mL/36oz.(1 can)per 4 GA pail
240mL/8oz.(1/4 can) per GA

**RECOMMENDED
APPLICATION:**

Spray type:

Fluid Pressure:

Air Pressure:

Tips: Kremlin
Wagner
Graco/CA and others

Reduction: Hand Spray

Reduction: Machine Spray (Recip or Rotary)

Spray type:

Fluid Pressure:

Tips: Fine Finish, Ultra Finish or Skill Tip

Reduction: Hand Spray

Reduction: Machine Spray (Recip or Rotary)

Air Assisted Airless

500-800 PSI

25 PSI (triggered)

06114, 09114, 09154, 09174

1150, 1350, 1360, 1380

411, 413, 511, 513, 611, 613

Not required, 3% RX010 suggested

Add 5% RX010 & 1% RX114

Airless

2000-3000 PSI

308, 408, 508, 410, 09-17

Not required, 3% RX010 suggested

Add 5% RX010 & 1% RX114

Envirolak

Technical Data Sheet
ELPR170
Revision Date: 2/8/2024

RECOMMENDED APPLICATION:

Spray type:	HVLP (Turbine) 5 stage or higher
Air Pressure:	Max
Needle:	1.8-2.0 needle high solids air cap
Reduction:	10% ELRX010 or 20-30% water
Spray type:	Cup Gun (gravity)
Air Pressure:	30-40 PSI
Tips:	1.8 needle
Reduction:	2-5% ELRX010 or 10-15% Water
Brush:	Medium/Firm Nylon or Polyester
Roll:	Mohair, Velour or 3/16 Microfiber
Reduction:	3-5% ELRX010 or 10-15% Water
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	

PHYSICAL PROPERTIES:

Specific Gravity:	1.5 ± 2%
Viscosity:	2500cps @20°C
Solids Content:	70% by weight
Pot Life:	None
Flash Point:	>75°C
VOC's:	54 g/L, 0.45 lb/gal
VOC's (Less Exempt):	62 g/L, 0.51 lb/gal

SANDING:

Sand raw wood or veneer with 150 or 180 grit to remove any mill glaze or oxidation. Sand MDF with 240 - 320 grit sandpaper especially any machined (saw marks, edges & routed-out areas) prior to applying primer. Sand primer with 320/400 grit sandpaper or fine/super fine sponges. Two coats can be applied same day back-to-back without sanding between and still achieve good adhesion, a quick scuff is required if more than 8 hours elapsed between coats. All of our primers must be sanded same day as topcoat application as they cure quickly, if the primer is sanded and left overnight it will require a quick scuff with maroon scotchbrite or a super fine sponge for adhesion before applying topcoat.

DRYING TIMES:	Dry to Touch	10 Minutes
Air dry:	Dry to Sand	40-60 Minutes
(20°C/68°F)	Dry to Stack	12 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 can be applied same day without sanding between. Refinish - Over Old Finishes**
Substrate: Old Honey Oak with Pre-cat Lacquer (from your uncles house in 1980)
Prep: Degrease, premix 1 part RX110 (Enviroklean) - 4 parts water, spray on surface, scrub with maroon scotchbrite or stiff nylon brush to loosen grease and contamination, wipe clean with wet rag with water to remove Enviroklean, wipe again with a dry rag to remove any remaining EnviroKlean or grease, allow to dry and sand with 180 grit or fine sponges
1 or 2 coats, ELPR170 White Primer with 2.5% - 5% by vol. ELCAT100LV Hardener
Sand using 320/400 grit sandpaper, refine with fine/super fine sponges
1 or 2 coats ELNYW200XX or ELACW400XX or EL100XX Topcoats 1K or 2K or ELNYW800XX 1K or with Crosslinker

New Construction - Solid Wood Frame with Veneer or MDF Center Panel
1 or 2 coats, ELPR170 White Primer with 2.5% - 5% by vol. ELCAT100LV Hardener
Sand using 320/400 grit sandpaper, refine with fine/super fine sponges
1 or 2 coats ELNYW200XX or ELACW400XX or EL100XX Topcoats 1K or 2K or ELNYW800XX 1K or with Crosslinker

TYPICAL SYSTEMS: **New Construction - Whites or Light Colours:**
Substrate: MDF
ELPR170 Envirothane White Primer 1K or 2K
Sand using 320 grit sandpaper or fine sponge
ELPR170 Envirothane White Primer 1K or 2K
Sand using 320/400 grit sandpaper, refine with fine/super fine sponges
1 or 2 coats ELNYW200XX or ELACW400XX or EL100XX Topcoats 1K or 2K or ELNYW800XX 1K or with Crosslinker

TYPICAL SYSTEMS: **New Construction - Dark Colours:**

Substrate: MDF

ELPR170 Envirothane White Primer 1K or 2K + 5% 896-9901 Black (turns dark grey)

Sand using 320 grit sandpaper or fine sponge

ELPR170 Envirothane White Primer 1K or 2K + 5% 896-9901 Black (turns dark grey)

Sand using 400 grit sandpaper, refine with super fine sponges

1 or 2 coats EL100XX Series Envirothane 1K or 2K tinted to dark 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.