

PRODUCT CODE: ELPR250

NAME: Envirothane 250 White 2K Primer

DESCRIPTION: ELPR250 is a specially designed non yellowing two-component primer for all interior wood and most plastic substrates. The 2K isocyanate chemistry (1hr pot life) imparts industry leading adhesion, chemical and water resistance for high performance finishing. Once cured and sanded this primer will be ready to finish with a wide variety of 2K or 1K topcoats. Allow 16 hours of cure time. If dye or tannin bleed is visible, a 2nd coat cured for 16 hours may be necessary for stubborn bleed issues.

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

PRODUCT PREPARATION: **Reduction is required for this product in order to give extended pot-life.** Add 12-15% water to the coating before mixing the CAT100-LV hardener into this primer for use.

MIXING RATIOS AND POT LIFE: Recommended mixing ratios are (minimum) 12% water and 10% CAT100-LV by weight. If you use this product without reduction your pot-life will be only **20-30 minutes**. With 12% water the pot-life is approximately 60 minutes after which the viscosity rises sharply until the product gels. Once it begins to kick it kicks hard fast, don't take chances with the pot-life and flush with water to prevent plugging of pumps, etc. Diaphragm pumps that run continuously or material heaters will shorten the pot life as heat reacts with the hardener.

1 GA ELPR250 : 600g ELCAT100-LV (1/2 Container)

4 GA ELPR250 : 2400g ELCAT100-LV (2 Containers)

When adding CAT100-LV, you should be mixing the coating while adding the hardener, you may find it easier to reduce the ELPR250 with water first to allow for faster mixing. Using less ELCAT100-LV (5% by wt.) will give you a slightly longer pot-life (90 minutes) but sacrifices a little in the way of adhesion, cure time and dye/tannin blocking.

**CATALYST RATIOS
USING CAT100-LV
HARDENER**

ELPR250

(approx. 20-30 min pot life @10%)

(approx. 60 min pot life @10% with the addition of 12% water)

by weight 10%

2.4kg (2 cans) per 22.7kg (4 GA) pail

600g (1/2 can) per 5.65kg (1 GA)

RECOMMENDED APPLICATION:

Spray type: Air Assisted Airless
Fluid Pressure: 500-800 PSI
Air Pressure: 25 PSI (triggered)
Tips: Kremlin 06114, 09114, 09154, 09174
Wagner 1150, 1350, 1360, 1380
Graco/CA and others 411, 413, 511, 513, 611, 613
Reduction: Hand Spray 12% -15% Water
Reduction: Machine Spray (Recip or Rotary) 12% -15% Water

Spray type: Airless
Fluid Pressure: 2000-3000 PSI
Tips: Fine Finish, Ultra Finish or Skill Tip 308, 408, 508, 410, 09-17
Reduction: Hand Spray 12% -15% Water
Reduction: Machine Spray (Recip or Rotary) 12% -15% Water

Spray type: HVLP (Turbine) 4 stage or higher
Air Pressure: Max
Needle: 1.5-1.8 high solids air cap
Reduction: 12% -15% Water

Spray type: Cup Gun (gravity)
Air Pressure: 30-40 PSI
Tips: 1.8 needle
Reduction: 12% -15% Water

Brush: Medium/Firm Nylon or Polyester
Roll: Mohair, Velour or 3/16 Microfiber
Reduction: 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: 1.44 ± 2%
Viscosity: 1600 cps @25°C
Solids Content: 60% by weight
Pot Life: 0.5-1.5 hours, see notes
Flash Point: >75°C
VOC's (material): 62 g/L, 0.51 lb/gal
VOC's (EPA): 183g/L, 1.53 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:

Air dry: (20°C/68°F)

Dry to Touch	10-20 Minutes
Dry to Sand	2 hours
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: (40-45°C/104-113°F)

Dry to Touch	5-10 Minutes
Dry to Sand	20-30 Minutes
Dry to Stack	1-3 Hours

Sun-Spot IR Cure: (Recommended)

Flash off	1-2 Minutes
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 PR250 can be applied same day without sanding between.
Refinish - Over Old Finishes**

Substrate: Oak, Maple, Cherry and various stained or painted substrates

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, ELPR250 White 2K Primer

Sand using 320 grit sandpaper and super fine sponges before top coat

1 or 2 coats ELNYW200XX or ELACW400XX Topcoats 1K or 2K or ELNYW800XX 1K or with Crosslinker

- TYPICAL SYSTEMS:** **New Finish - Solid Wood Frame with Veneer or MDF center panel**
Sand raw wood or veneer with 150-180 Sandpaper
1 or 2 Coats ELPR250 White 2K Primer
Sand using 320 grit sandpaper super fine sponges
1 or 2 coats ELNYW200XX or ELACW400XX Topcoats 1K or 2K or ELNYW800XX 1K or with Crosslinker
- 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 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.