

PRODUCT CODES: EL100XX (EL10005, EL10010, EL10020, EL10030 ,EL10050, EL10090)

NAME: ENVIROTHANE 100 WARM CLEAR SELF-SEAL TOPCOAT

AVAILABLE SHEENS:

EL100 05	5 Gloss - Dead Flat
EL100 10	10 Gloss - Flat
EL100 20	20 Gloss - Low Gloss
EL100 30	30 Gloss - Satin
EL100 50	50 Gloss - Semi Gloss
EL100 90	90 Gloss - High Gloss

DESCRIPTION: EL100XX series is a warm clear urethane topcoat which is also tintable for dark colours. It provides a lasting, durable finish for wooden surfaces that meets or exceeds KCMA standards as a 1k product. The product can also be catalyzed with CAT100-LV hardener or crosslinked with CAT150 crosslinker to improve chemical, scratch, mar resistance and vertical flow. This product combines outstanding toughness and stain resistance with the wood warmth and hand-feel of traditional solvent-based coatings, all in a low VOC water-based finish. Only use 100 series over raw wood, Envirostain's, 170, 170-TB or 180 primers, SEAL300 and as a self seal or over itself as a 1K or 2K with CAT100LV or CAT150. 100 series can also be used over SEAL500 as a 2K with CAT100LV.

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

PRODUCT PREPARATION: Reduction is not required when spraying with Air Assisted Airless or Airless, however, adding 3% RX010 reducer or 5-10% water will improve application characteristics when used as a clear coat. 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 to ensure consistency and gloss. Drill mix any soft settling off the bottom of a can is recommended.

**CATALYST RATIOS
USING CAT100-LV
HARDENER**

EL100 XX Series
(approx. 2 hr pot life @10%)
(approx. 4 hr pot life @5%)

by weight ~10%
2.4kg (2 cans) per 19.6kg (5 GA) pail
480g (2/5 can) per 3.9kg (1 GA)
by volume ~10% (10:1)
2.12L (2 cans) per 5 GA
425mL/14.4oz.(2/5 can) per GA

**CATALYST RATIOS
USING CAT150
CROSSLINKER**

EL100 XX Series
Per Quart:
Per Gallon:
Per Pail (5 GA):

by weight ~ by volume
29 grams, 25mL ~ 0.9 fl oz.
117 grams, 100mL ~ 3.4 fl oz.
582 grams, 497mL ~ 17 fl oz.

RECOMMENDED APPLICATION:

Spray type:	Air Assisted Airless
Fluid Pressure:	500-600 PSI
Air Pressure:	25 PSI (triggered)
Tips: Kremlin	04114, 06114, 09114, 09154
Wagner	0950, 1150, 1350, 1360, 1380
Graco/CA and others	411, 413, 511, 513, 611, 613
Reduction: Hand Spray	0-3% RX010 or 0-10% H2O
Reduction: Machine Spray (Recip or Rotary)	0-3% RX010 or 0-10% H2O
Spray type:	Airless
Fluid Pressure:	2000-3000 PSI
Tips: Fine Finish, Ultra Finish or Skill Tip	306, 308, 408, 508, 06-17
Reduction: Hand Spray	0-3% RX010 or 0-10% H2O
Reduction: Machine Spray (Recip or Rotary)	0-3% RX010 or 0-10% H2O
Spray type:	HVLP (Turbine) 5 stage or higher
Air Pressure:	Max
Needle:	1.8-2.0 needle high solids air cap
Reduction:	3-5% ELRX010 or 10-15% water
Spray type:	Cup Gun (gravity)
Air Pressure:	25-35 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 10-20% Water
Wet Film Build:	4-6 mils
Grams per 1/10 sq. metre: (250x400mm board)	8.5-11g
Number of Coats:	1-3 depending on desired look
Maximum Dry Film Build:	5 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:	1.02 ± 2%
Viscosity:	2000-2500 cps. at 20°C
Solids Content:	30% by weight
Pot Life:	None
Flash Point:	>75°C
VOC's:	51.2 g/L, 0.43 lbs/gal
VOC's (Less Exempt):	150 g/L, 1.25 lbs/gal

SANDING: Sand raw wood 150- 180 grit to remove any mill glaze, wide belt scratches or oxidation. Sand EL100 XX between coats with 320 or 400 grit sandpaper and refine with superfine sponges.

DRYING TIMES:

Air dry: Dry to Touch 20 Minutes
(20°C/68°F) Dry to Sand 1-2 Hours
Dry to Stack 12-16 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 10 Minutes
(40-45°C/104-113°F) Dry to Sand 30-60 Minutes
Dry to Stack 3-4 Hours

Sun-Spot IR Cure: Flash off 1-2 Minutes
(Recommended) Direct Cure 5-10 Min. @60-70°C (140-160°F)
Rack Cure (Indirect no probe mode) 10-30 Minutes @20%+ power
Cool Down 10-20 minutes
Product is dry to sand (or stack) after cooling

TYPICAL SYSTEMS: **Stain System:**
Substrate: Various Woods, check adhesion on oily woods (teak, ipe, brazilian cherry, etc.) prior to finishing
Sand raw wood with 150 or 180 grit sandpaper and fine sponges
Envirostain wiping, spray, roll coat or dipping stain
EL100XX Topcoat 1K or 2K with CAT100LV or 2K with CAT150
Sand between coats using 320-400 grit sandpaper and refine with superfine sponges
1 or 2 coats EL100XX Topcoat 1K or 2K with CAT100LV or 2K with CAT150

Substrate: Various Woods, check adhesion on oily woods (teak, ipe, brazilian cherry, etc.) prior to finishing
Sand raw wood with 150 or 180 grit sandpaper and fine sponges
Envirostain wiping, spray, roll coat or dipping stain
1 or 2 coats SEAL500 1K or 2K with CAT100LV
Sand between coats using 320-400 grit sandpaper and refine with superfine sponges
1 or 2 coats EL100XX 2K with CAT100LV

TYPICAL SYSTEMS: Dark Solid Colours:

Substrate: MDF
ELPR170 White Primer 1K or 2K + 5% 896-9901 Black (makes dark grey)
or ELPR180 Neutral Primer 1K or 2K tinted to any dark color including black
Sand using 320 grit sandpaper and fine or superfine sponges
ELPR170 White Primer 1K or 2K + 5% 896-9901 Black (makes dark grey)
or ELPR180 Neutral Primer 1K or 2K tinted to any dark color including black
Sand using 400 grit sandpaper and refine with superfine sponges
1 or 2 coats EL100XX 1K or 2K with CAT100LV or 2K with Crosslinker 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.