

PRODUCT CODES: ELBSS

NAME: EnviroStain - Binder for Spray Stain/Pore Marking

DESCRIPTION: ELBSS is a binder in our EnviroStain system. All of the EnviroStain Binders are concentrates that are intended to be mixed with water prior to use. This binder is the primary resin for making spray stains (no wiping).

ELBSS has a medium dry time and enhances grain pickup in spray stain applications. It gives lower uniformity of colour than the wiping stains and is added to the ELBWS wiping stain binder to increase contrast and pore marking.

Please see our product preparation guide below for recommended starting formulations.

USES: This product is designed for interior wood finishing applications such as cabinetry, tables, furniture and millwork. The finished stain (Binder + Water + Tints/Dyes) is intended to be sprayed (no wiping).

SANDING: Substrate should be sanded with 180 grit sandpaper prior to applying any stains. Finer grit sandpaper (240/280) can be used to minimize sanding scratches or swirls.

PRODUCT PREPARATION: Start with 10-15% ELBSS Binder, add up to 10% ELTINT Micronized Pigments, up to 5% of ELDYES Dye Concentrate can be added if desired to increase vibrancy. Add Water to bring the total mix to 100%. ELDGB Binder can substitute some of the ELBSS Binder for improved uniformity.

GENERAL FORMULA:
(min/max levels)

Product	% by weight
Water	70-85
ELBSS	5-15
ELBDG (optional - more uniform)	0-5
ELTINT	0-10*
ELDYE	0-5*

*if you use less than this %, make up the difference with water

RECOMMENDED STARTING FORMULAS:

Substrates: Maple, Walnut, Beech, Birch

Product	% by weight
Water	80
ELBSS	10
ELTINT	10*

*if you use less than this %, make up the difference with water

**RECOMMENDED
STARTING
FORMULAS:**

Substrates: Oak, Ash, Acacia

Product	% by weight
Water	75
ELBSS	15
ELTINT	10*

*if you use less than this %, make up the difference with water

Substrates: Pine, Fir, Poplar

Product	% by weight
Water	85
ELBSS	5
ELTINT	10*

*if you use less than this %, make up the difference with water

**RECOMMENDED
APPLICATION:**

Application is by spray, either cup gun, HVLP turbine, pressure pot or air-assisted airless spray. For air-assisted airless spray we recommend 04 or 06 tips, 15 PSI air and a fluid pressure that gives you an even spray pattern without tails or spitting (this will vary depending on your pump size). You are better to apply lighter passes, building the colour to the desired darkness until you know how the stain will react with the substrate.

Spray type: Air Assisted Airless
Fluid Pressure: ~200-300 PSI
Air Pressure: 15 PSI (triggered)
Tips: Kremlin 04114, 04134, 06114-06154
Wagner 0950, 1150
Graco/CA and others 411, 511, 611

Spray type: Cup Gun (gravity)
Air Pressure: 18-20 PSI
Tips: 1.5 - 1.8
Reduction: Not required

Wet Film Build: 2-4 mils
Grams per 1/10 sq. metre: (250x400mm board) 7-12 grams
Number of Coats: 1 (single or double pass)
Maximum Dry Film Build: NA
Coating Temperature at Application: 18°C (65°F) or higher

**PHYSICAL
PROPERTIES:**
(of the ELBSS)

Specific Gravity:	1.03
Viscosity:	600-1000cps
Solids Content:	12.85%
Pot Life:	NA
Flash Point:	>100°C
VOC's:	147 g/L
VOC's (minus exempt):	310 g/L

As a low solids product, these VOC values are California Air Resource Board (CARB) compliant.

DRYING TIMES:

Air dry:
(20°C/68°F)

Dry to Touch:	5-10 Minutes
Ready to Seal:	20-30 Minutes

Note: Gentle air movement (recirculator or fan) while parts are drying will reduce dry times by 20-40%

Conventional Oven:
(40-45°C/104-113°F)

Dry to Touch:	5 Minutes
Ready to Seal:	10-15 Minutes

TYPICAL SYSTEMS:

Apply stain to sanded wood substrate and coat with clear sealers or self seal using topcoat. Recommended products include ELSEAL300, ELSEAL500, 100 series, 300 series, 500 series or 550 series.

SUITABLE TINTS:

ELBSS, once reduced, is designed to be tinted with the ELTINT line of micronized pigments. It is also compatible with the ELDYE concentrates, although usage levels of the dyes should be less as they are very strong.

**TINTING
INSTRUCTIONS:**

Stain System	Maximum Tint/Dye Loading
ELBSS Spray Stain	10% tint/5% dye

Note that when using pigments and dyes together in the same colour the storage stability of the colour will be reduced depending on the concentrations used. To ensure colour consistency, stains must be shaken/mixed prior to use and should be under low agitation if being used in production for a prolonged period.

**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.