

The REDUCER & RETARDER are so Important to the successful application and use of the Ultra Penetrating & Solar-Lux dyes, we discuss them first.

#### **Dye RETARDER** *Directions:*

Add Retarder to NGR Dyes to slow drying or to increase open or working time. The slower evaporation helps penetration especially on harder dense and resinous woods. Retarder can be mixed with all colors of the NGR Dyes. Color intensity will also be reduced or lightened with the addition of Retarder.

*If retarder is used to slow drying, DO NOT exceed a 10% addition by volume.* 

#### **Dye REDUCER**

NGR DYE Reducer may be mixed in any proportion with NGR Dye Stains to reduce the color intensity.

*Directions:* Test color while adding small amounts of reducer until desired tone is achieved.

To slow the drying or increase the open or working time of NGR Dyes use the NGR Retarder according to directions.

## Transparent NGR (non-grain raising) Dye-based stain

Ultra Penetrating / Solar-Lux Dyes have excellent light fastness and fade resistance.

#### **Directions:**

NGR DYE Stain may be brushed, wiped or spray-applied (using low psi spray pressure).

Intermix NGR Dye colors to arrive at required custom tones. To make a lighter color tone or reduce the color intensity add NGR Reducer as needed.

Normal 5 minute drying time may be slowed with up to a 10% addition of the NGR Dye Retarder to facilitate a brush or wiping application.

#### Lacquer Toner:

Ultra Penetrating / Solar-Lux Dyes may be added to nitrocellulose lacquers or shellac to make a toning and shading finish *(best spray applied)*.

(DO NOT exceed 8 oz. of dye per gallon of finish.)

# Additional Notes & Information:

Dyes are used on BARE unfinished wood or on thoroughly stripped and finish free surfaces. Unlike pigmented wiping stains, dyes have no ground pigment particles to lodge in wood pores. The Pigment of wiping stains tend to emphasize the grain structure and collect in the pores of the wood.

NGR Dyes are the perfect answer to minimize grain structure while uniforming a base color, enhancing color, or providing a darker base tone on which to apply a finish.

If used to obtain deep rich tones, especially on harder woods (too keep the background free of pore filler color) the Dye should be sealed with a seal-coat or sanding sealer prior to using a paste-wood pore filler.

A pre-stain barrier coat or light sealer coat will also control the color depth of any pigmented wiping stain used over the dye coat.

Always test on a scrap of the same wood with similar grain structure as the your project.

Final Color evaluation should be made with finish coats in place. The topcoat sheen will add richness, tone depth, highlights, and influence the overall perceived color.

Adjust the color so that a saturated coat when dry and top-coated will yield the desired result. For consistency and predictable result DO NOT attempt to lighten tones by wiping away color, mix the proper tone using the NGR Reducer.

Remember that wood tone is the most important tone in the finish color and will greatly affect the final result.

# Terminology -

## Dye & Stain Definitions:

*Dyes* are translucent like tea and have no pigment that will settle to the container bottom.

**Stains** have, drying agents, resins, bonding additives and fine ground pigment and sometimes include some dye colorant. Stains must be shaken or stirred well prior to application

Due to the nature of Stains it is almost impossible to obtain deep rich tones on lighter woods.

**Dyes** penetrate into the wood fiber. A first application of dye on light woods will allow a dark wiping stain to achieve the desired effect without over application and the resultant grain masking "painted look.

With the newer VOC Compliant formulations, use of NGR RETARDER is HIGHLY RECOMMENDED, especially for dye application by hand.

available at: Shellac.net Wood Finish Supply