

Aniline Dyes Wood Magazine

Aniline dyes offer another approach for your finishing. Whether in wood tones or bright hues, these transparent dyes impart rich color without obscuring the grain.

Changing or enhancing the color of wood while letting its grain show through has been a favorite finishing technique for centuries. Today we often accomplish this with pigmented stains. But before the 1950s, most wood coloring was done with dyes. Dyeing wood became popular early in the 19th century. The natural dyes available then, extracted from roots, berries, bark, and even insects, yielded beautiful, clear colors. But they weren't lightfast, so the dyed wood faded or changed color over time. In the 1850s, a British chemist accidentally produced a strong purple dye while working with aniline, a clear, oily, poisonous liquid. Subsequently, scientists synthesized other dye colors. These synthetic dyes delivered the same sparkling colors as the natural ones and were lightfast to boot. They were cheaper, too. Derived mainly from coal tar, synthetic dyes in general came to be known as aniline dyes, and a new chemical dyemaking industry sprang up around them.

The dyes are fine powders. When mixed with water, the ones shown at left become (from left) lemon yellow, brilliant scarlet, bright green, pink, nigrosine black, dark forest green (yes, the brown-looking one), and dark wine cherry. Aniline dyes offer an attractive finishing choice today. Pigmented stains, which some people characterize as thinned paints, may mask the wood's figure and can lend wood a muddy look. But transparent dye colors, even dark ones, can bring out the grain and add depth. Here's how to dye wood.



Fixin' to dye

Aniline dye comes as a powder that you dissolve in water, alcohol, or petroleum solvents, depending on the formulation. We prefer the water-soluble dyes because they offer maximum clarity and colorfastness and are the easiest to use. The J.E. Moser water-soluble aniline dyes used here come in more than six dozen colors from wood tones to bright primary shades and cost around \$4 to \$6 per ounce (which makes a quart of liquid dye). We got our dyes from Woodworker's Supply, Inc., 800/645-9292.



For use, stir the dye powder into hot water, as shown left. (Don't mix it in boiling water; straight hot tap water works fine.) Rubber gloves will keep you from having fancy-colored fingertips. The standard concentration is 1 oz. of powder to 1 qt. of water. To mix smaller amounts, dissolve about 1/4 tsp. of powder into 8 oz. of water; about 1/8 tsp. into 4 oz. From this starting point, you can adjust the dye color to suit your taste. Just add more water to reduce color intensity, or add dye powder to increase it. After mixing, let the dye cool. Then strain the solution through a coffee filter or nylon stocking, as shown at left, before applying it to the wood. Label the aniline dye containers.



Tips on dyeing the wood Sand the project as you would for staining or clear finishing. Do not seal or fill the wood; it must absorb the dye. Put on the dye by any convenient means--

brushing, wiping, spraying, or dipping. You don't need top-quality brushes to apply aniline dyes. We found that inexpensive foam brushes work just great. The easiest application method calls for two brushes. Paint on the dye with one brush, keeping the work surface wet, as shown. Wipe away any excess with another brush. Dye strength controls the color, so you don't need to worry about uneven coats. We found that brush marks and laps posed no problem. If we kept the surface uniformly wet, the color invariably came out smooth and even. Allow the first application to dry 24 hours. The water-based dye raises the wood grain, so sand away the fuzz with 320-grit abrasive. Clean off the sanding dust, and dye the wood again. Let this application dry, then buff the surface with a white Scotch-Brite pad. You can apply any clear finish to the dyed wood.

