

TECHNICAL DATA SHEET TransFast Water-soluble Powdered Dye

Homestead Finishing Products

P O Box 360275 Strongsville, OH 44136-0005 Phone: 216-631-5309 www.homesteadfinishing.com

Product Description TransFast Dyes are water soluble concentrated dyes in powder form. The product is designed to be dissolved in water and used as a dye stain on bare wood. Once dissolved, it can also be added to clear finishing materials, stains and other products.

Advantages TransFast powdered dyes are very economical and safe to use. Mixed with water they are non-flammable, **zero-voc** and low odor. They can be top-coated with any finishing material.

Using TransFast Dyes The powders should be dissolved in hot water and are ready to use by the time the solution has cooled to room temperature. We recommend mixing up only half the bottle contents at first, that way you have some extra left over if you need to make the dye stronger. Tap water is fine but use distilled water if using a very dilute dye – otherwise small, gray dots may appear on the surface of some woods like oak and cherry. Most dyes do not need to be strained, although it's a good idea to strain the dye through a fine mesh strainer if you use it right after mixing to prevent large un-dissolved dye particles from streaking your wood.

Tip: Since water raises the wood grain, a pre-grain raising may help, particularly with coarse textured woods such as oak. To pre-raise the grain - use distilled water and sponge the wood liberally. An alternate method is to make a very dilute version (1 tsp. per qt. water) of the dye instead of the distilled water. After drying, sand with the last grit in your sanding schedule.

To apply the dye, flood the surface with dye from a rag, brush or sponge, and work it quickly to cover the surface. Get the entire surface wet with dye until it's uniformly saturated. Wipe off the excess and let the dye sit until dry. On chairs and other complex items you can apply the dye with a spray gun (a small detail gun works great) or a plant mister. On frame and panel doors or other complex surfaces, use a small brush or a "used" synthetic steel wool pad to work the dye into crevices and corners. If you miss a spot, apply more dye and blend it in to the dyed area.

The color of the wood when wet with dye is not necessarily the color when it's finished. To get a good idea of whether or not the intensity and shade is correct, let the dye completely dry, and then wipe it with mineral spirits or naphtha. However, dyes shift in shade depending on the finish applied, so the only way to be truly accurate is to practice on some samples and finish them with several coats of the finish you'll be using. To make a dye stronger, add more dye to the solution. To make a dye weaker, add more water. To lighten up a surface that's already dyed, apply clean water with a clean rag before the dye is fully dry. You can remove quite a bit of color but never all of it. If you need to change/adjust the color, apply a different color dye.

On wood with very pronounced pores like oak and ash, you may notice that the pores do not accept dye and remain unstained. This is the reverse effect of pigmented stains. There are a couple of options in dealing with this.

- Use a paste wood filler to fill and color the pores
- Color the pores with a pigmented glaze or stain after sealing the dye with finish

Always test on a sample for satisfactory results. See "Controlling Uneven Staining" below for uneven staining control.

Top-coating the Dye TransFast Dyes <u>must</u> be finished with a clear finish to seal the color. Any finish can be used; however problems can occur with certain finishes. When top-coating with water-based finishes, the dye can migrate or "bleed" into the topcoat causing a muddy appearance. We recommend using non-water based sealer such as dewaxed shellac or an oil finish to eliminate this. Also when wiping or brushing water based finishes and shellac, some dye can be picked up by the brush or rag. Sealing with an oil based finish will alleviate this problem, or you can spray the product rather than wiping. A very easy solution is to spray over the dye with aerosol shellac (Zinsser Brand) to lock down the dye.

Adding Dye to Other Products TransFast Dyes can be added to water based finishes and other water based products like glue, putty, and stains. Never add the dye powder directly to a product, instead, dissolve the dye in a little hot water first, and then add. Always test before using. To add to water based finishes, stir the desired amount or pre-dissolved dye into the finish, then stir gently for 30 seconds. Let the dye/finish sit for at least 30 minutes before using. Failure to do this may result in "shocking" the emulsion. In some cases, the water base finish may turn stringy or gel slightly. This indicates an incompatibility.

Changing the Color of the Dye Dyes is transparent and they penetrate deep into the wood. Because of this, you see the color of the dye plus the natural color of the wood on dyed wood surfaces. So if you apply a dye to the wood and it's not quite the color you want, you can change the color (sometimes dramatically) by wiping different colored dyes right over the dye you applied. Because dyes have no binder, you can color-correct the dye when it's still wet or when it's fully dry. The following are general rules to modify the color.

- To make the color darker, try making the dye stronger first. If that doesn't work add a little black or dark brown (Extra Dark Walnut) dye.
- To shift a wood tone stain color to something redder, or more orange, try adding that primary color to the dye.
- To make a color brighter, add yellow.
- To make a color less bright, add a little black.
- To neutralize a color, add its complementary color (see chart)

If the Color is too	Add its complementary Color
Red	Green
Yellow	Purple
Blue	Orange
Green	Red
Orange	Blue
Purple	Yellow

Inter-Mixing TransFast Dyes TransFast Dyes are intermixable with all other water soluble dyes, including TransTint dyes.

Controlling Uneven Staining When uneven staining happens it's a condition known as splotching. This can happen with any wood, but is most prevalent with all softwoods (pines, firs, etc.) and in the hardwoods; cherry, poplar, maple, aspen, alder and birch. If uneven staining occurs there are several remedies.

- Spray the stain and do not wipe it.
- Apply a washcoat*.

Apply the washcoat and let it dry completely. Apply it by hand or spray. Sand the washcoat with 320-400 grit sandpaper, remove the dust, and then apply your stain. This procedure requires experimentation and not all wood species react the same way.

Storing Dyes Unmixed powdered dyes have no shelf life. It is recommended to keep the product in a cool, dry place and keep the top on tightly and capped. Some colors may change over time once they are mixed so it's always best to mix up what you will be using right away. If you use dye that has been mixed up and stored for over several months, <u>always</u> check the color first before you apply it to your project. Store the mixed dye in a clean plastic or glass container and properly label the contents and date mixed on the container. Do not use metal containers. And as with all dyes and stains, keep out of children's reach.

TransFast is a trademark of J.B. Jewitt Co., Inc.

MSDS for all TransFast Water-soluble Dyes are available at: www.homesteadfinishing.com/htdocs/msds.htm

^{*} A washcoat is a thinned finish that will partially seal the wood but still allow the stain to penetrate. Examples are 1/2 - 1 pound cut shellac, water based finish thinned 2:1 water/finish or premixed stain controller for water based stains.