

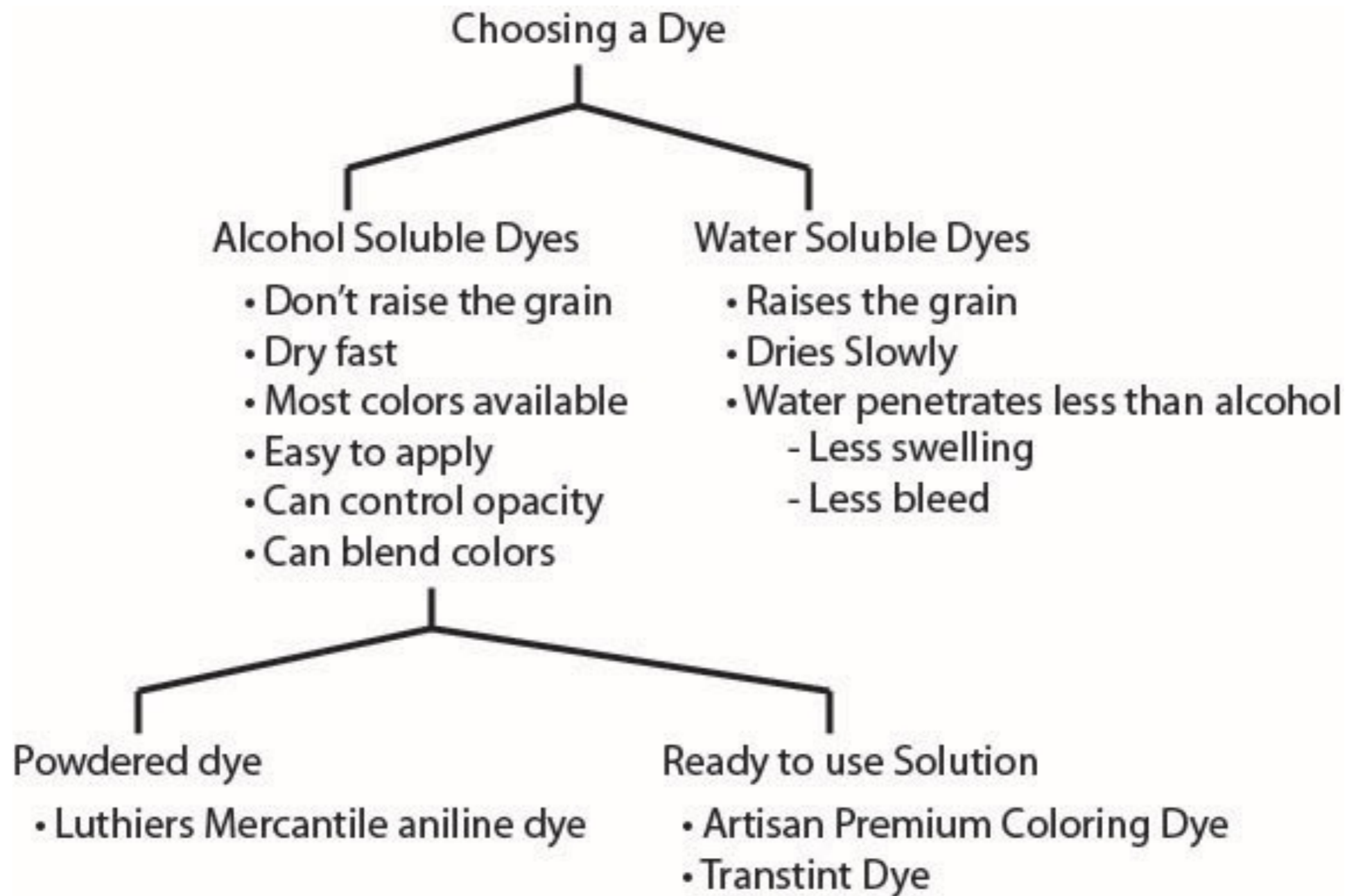
Dying Wood



David Windsor 5/18

Topics

- Choosing a dye
- Safety
- Dissolving & storing dyes
- Custom colors
- Surface preparation & Resists
- Application
- Sealing



Water Soluble Dyes

Characteristics:

- Raises the grain
- Dry slowly
- Less penetrating than alcohol soluble dyes
 - less swelling
 - less bleed through

Best Use:

- Single color on porous wood

Alcohol Soluble Dyes

Characteristics:

- Do not raises the grain
- Dry quickly
- Easy to apply
- Easy to control intensity and opacity
- Colors are easily blended

Dyes evaluated:

- Luthiers Mercantile aniline dye
- Artisan Premium Color dye (Craftsupplies)
- Trans Tint Dyes (Woodcraft)

Safety

- None of the dyes are particularly toxic
- Beside ethanol some dyes contain methanol
- As with all chemicals it's best to limit exposure
 - Wear gloves
 - Wear eye protection
 - Work in a well ventilated space

Luthiers Mercantile Aniline Dyes



Red

Yellow

Blue

- Purchase online at lmii.com
- Cost/color is \$4.46 per 1/2 oz of powder
- 1/2 oz of powder makes at least 2 qt. of dye
- 2 qts of dye cost ~\$13 with the alcohol

Artisan Premium Coloring Dyes



Red

Yellow

Blue

- Cost/color is \$3.50 per 1.7 oz of dye
- Dyes are ready to use but can be diluted with alcohol but not a lot
- Solvent contains shellac which slows drying time

TransTint Dyes

(Available at Woodcraft)



- Cost/color is \$20.99 per 2 oz of concentrate
- Dyes can be diluted with alcohol
- 2 oz of concentrate makes 2 qt of dye
- 2 qt of dye cost ~\$30 with the alcohol

Primary Colors

Luthiers Mercantile Aniline Dye on Maple



Artisan Premium Coloring Dye on Maple



Secondary Colors

Luthiers Mercantile Aniline Dyes on Maple

Red & Yellow make Orange



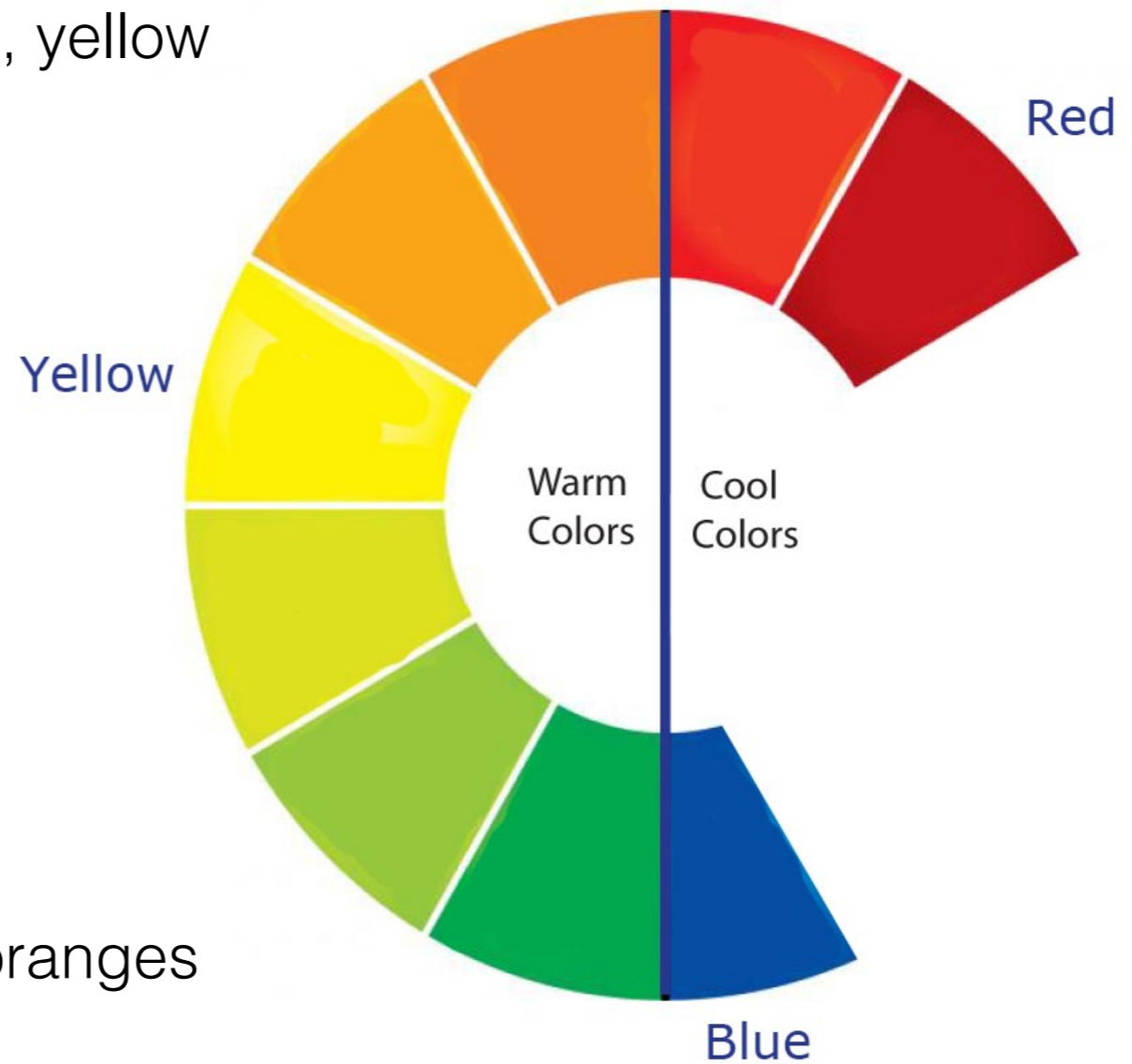
Blue & Yellow make Green



Red & Blue make Brown



Colors available using only red, yellow and blue alcohol soluble dyes



- Red and yellow mix to give oranges
- Blue and yellow mix to give greens
- Blue and red DO NOT mix to give purples

Dissolving Luthiers Mercantile Dye

- Rinse a 2 quart container with water then alcohol (pop bottles work well)
- Using a small scoop or a tongue depressor add about 1/4 oz of powder to the container through a plastic or glass funnel
- Add 1 qt of denatured alcohol through the funnel being sure to wash all the powder into the container
- Cap the container and shake to dissolve the powder
- Place the funnel in a 1 qt glass bottle with a plastic not metal cap
- Pour the dye into the glass bottle and cap it
- Allow any undissolved powder to settle before using the dye

Mixing custom colors

- Only mix two primary colors for each custom color
- I mix the primary colors by adding them to a plastic jar with a disposable transfer pipette
 - 6 oz plastic jar #S-12753 from uline.com
 - 3 ml disposable transfer pipette from Amazon.com
- This is a lot less messy than pouring the dye solutions
- Gives control over the ratio of the volumes of the primary colors

Surface Preparation and Resists

- Sand all surfaces to 180 grit
- Pre raise the grain for water based dyes
- Coat the piece with a UV resistant acrylic spray
 - The acrylic spray acts as a resist on areas you don't want dyed
- Sand the surfaces to be dyed to the final grit

Application Methods

- There is no one right method!
- You can sand between coats to not
- You can allow to dry between coats or not
- You can change the order colors are applied

Applying the First or Single Color

- Easiest applicator is a 1” foam brush
- Apply one coat, blot the brush then even out the color before it dries
- Re-coating
 - If applying a single color allow to dry between coats
 - For multiple colors or blending allow to dry or not depending on the desired affect
- Add coats until the desired intensity is achieved

Multiple Color Application and Blending

- There is no one method fits all for multiple colors
- Best to experiment and do test pieces
- If you don't like the result sand it off and try again

Multiple Color Application Without Sanding between colors

- Sand the area to be dyed to 600 grit
- Apply the darkest color (blue or red) first covering the entire area to be dyed
- Apply the second color (green or orange)
 - using blotting or other techniques
- Apply the yellow color
 - using blotting or other techniques
- Sand lightly with 600 grit

Blending

- Apply the first color using the single color method
- Apply a second color and using a “blending tool” (e.g. piece of paper towel, cotton swab or Q tip)
- If the previous coat is dry the colors will mix less than if it is wet
- After two colors are dry they can be further mixed using just alcohol
- Additional colors can be added

Multiple Color Application With Sanding between colors

- Sand the area to be dyed to 400 grit
- Apply the darkest color (blue or red) first covering the entire area to be dyed
- Sand with 320 grit
- Apply the second color (green or orange)
- using blotting or other techniques
- Sand with 400 grit
- Apply the yellow color (yellow)
- using blotting or other techniques
- Sand with 600 grit

Sealing the Dye

- 1) Two coats of UV resistant acrylic spray (dry between coats)
- 2) Three light coats of semi gloss spray polyurethane (dry between coats)
- 3) Sand lightly with 800 grit sandpaper
- 4) Two light coats of spray polyurethane (dry between coats)
- 5) Sand lightly with 800 grit sandpaper
- 6) If any color comes off on the sandpaper repeat steps 4 & 5
- 7) Apply a light coat of Renaissance wax and rub it in
- 8) Buff with a furniture buffing pad