

# Immersion Dyeing on Wool

## using WashFast Acid Dyes

Please read directions thoroughly before starting.

*These WashFast Acid Dyes are for wool, silk, angora, and mohair. They are normally applied at a boil and only up to 185F (85C) for silk. These directions are based on dyeing one pound (454 gm) of fiber. Please increase or decrease the amounts proportionately. Always do test samples before working on a large project.*

- ✘ Wear rubber gloves, apron, or old clothes.
- ✘ Utensils used for dyeing should never be used for food preparation.

### Supplies

WashFast Acid Dye

Citric Acid Crystals,

Ammonium Sulfate

or white distilled vinegar

Non-Iodized or Glauber Salt

Synthrapol

### Procedure

**1. Wet out the fiber** by measuring ½ tsp (2.5 ml) Synthrapol in 2½ gallons (10 liters) of warm 110F (44C) water, for each pound (454 gm) of fiber. Soak for at least 30 minutes.

**2. Dissolve the dye.** Measure the desired amount of dye powder, from the following chart, into a Pyrex container. Dissolve the dye powder with 1 cup (250 ml) of boiling water for pale and medium shades; use 2 cups (500 ml) of boiling water to dissolve dark shades and black. Stir thoroughly and set aside while making the dye bath.

	Pale	Medium	Dark	Black
Dye Powder	½ tsp (1.2 gm)	1¾ tsp (4.5 gm)	3½ tsp (9 gm)	10 tsp (25 gm)
Salt	1 Tbl (15 gm)	1 Tbl (15 gm)	1 Tbl (15 gm)	1 Tbl (15 gm)
Synthrapol	1 tsp (5 ml)	1 tsp (5 ml)	1 tsp (5 ml)	1 tsp (5 ml)
Acid (choose one)	1 Tbl (15 gm) Citric Acid Crystals <b>or</b>	1 Tbl (15 gm) Ammonium Sulfate <b>or</b>	1 1/2 Tbl (165 ml) white vinegar	

**3. Make the dye bath** by pouring 3½ gallons (14 liters) of room temperature 75° to 95°F (24° to 35°C) water into a stainless steel or unchipped enamel pot. The pot should be large enough to allow the fiber to move freely without spilling the dye bath. Add the dissolved dye, salt, Synthrapol, and acid (Citric Acid Crystals, Ammonium Sulfate or white vinegar). Stir thoroughly.

**NOTE:** Leftover dissolved dye can be stored for a minimum of 6 months.

**4. Add the fiber.** Squeeze out the excess water from your fiber and add it to the dye pot. Stir gently for 3 to 5 minutes to uniformly distribute the dye. Gradually raise the temperature to a boil. Stir intermittently for 60 minutes. If you are dyeing silk, raise the temperature only to 185°F (85°C) and maintain this temperature for the 60 minutes. Do not go above 185°F (85°C) or you may ruin the luster of the silk.

After 60 minutes, check to see if the dye bath water is fairly clear or if it has lots of color still left in it. If it has lots of color, slowly add 6½ Tbl (100 ml) of white distilled vinegar to the dye bath. Make sure you don't pour the vinegar directly on your fiber. Simmer for another 10 minutes.

**5. Rinse the fiber.** Allow the dye bath to cool to room temperature. Remove the fiber and rinse it well in warm water. Squeeze out the excess water and air dry.

### **Helpful information to know**

- Once the WashFast Acid Bright Red 351 and Bright Blue 440 are dissolved and cooled to room temperature, they have a tendency to form a gelatinous solution. Warm the dye solution up and it is easy to measure. Or you can add up to 4 Tbl (50 gm) of Urea to each cup of dye solution to inhibit the dye from becoming gelatinous. Add the urea once the dye solution cools to 120°F (49°C). Discard the dye solution if you detect an ammonia smell.
- Use Citric Acid Crystals or white distilled vinegar to set the dye for dark colors and black. We've found the results to be darker.

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