

# Low Water Immersion Dyeing

## using PRO MX Reactive Dyes

Please read directions carefully before starting.

*This is a fun and quick way to get 1 to 3 colors on your Cotton, Linen, Rayon or Silk fabric. It all happens in about an hour with very little water and no salt! These directions are based on dyeing one yard (1 meter) of fabric. Please increase or decrease the quantities proportionally for the yardage you want to dye. Always do test samples before working on a large project. For additional information, visit our website at [www.prochemicalanddye.com](http://www.prochemicalanddye.com).*

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

### Supplies

PRO MX Dye Powder  
 Ludigol F (previously known as PRO Chem Flakes) (optional - use if you live in a smoggy environment)

PRO Dye Activator or Soda Ash  
 Urea  
 Synthrapol  
 Metaphos ( water softener: optional - use if you have hard water)

### Procedure

**1. Scour the fabric** by machine washing in HOT 140°F (60°C) water, or by hand in a pot on the stove with ½ tsp (2 gm) PRO Dye Activator or Soda Ash and ½ tsp (2.5 ml) Synthrapol per pound of fabric (454 gm, or 3 to 4 yards cotton muslin, or 8 yards 8mm China Silk, or 3 Medium T-shirts, or 1 sweatshirt). Rinse thoroughly. This step does not add the dye fixative to the fabric; it prepares your fabric for dyeing by removing any dirt, oil or sizing.

**2. Make the Urea Water** by mixing together the ingredients below. Allow Urea Water to cool to room temperature before using. Store unused Urea Water at room temperature in a closed container. Discard it if you detect an ammonia smell.

- 9 level Tbl (100 gm) Urea
- 1 level tsp (2 gm) Ludigol F (PRO Chem Flakes) (optional)
- 1 level tsp (7 gm) Metaphos (optional)
- 1 quart (1 liter) warm 110°F (44°C) water

**3. Prepare the dyes.** Decide if you want to dye your fabric with one, two, or three colors. Then follow the quantities listed in the 1 Color, 2 Colors, or 3 Colors chart below. Next, decide if you want your color to be pale, medium, dark or black. Measure the desired amount of dye from one of the charts below, in a one cup (250 ml) measure. Add 2 Tbl (30 ml) of Urea Water to this dye and stir thoroughly, making a paste. Then add enough Urea Water to the pasted dye to equal 1 cup, ½ cup or ⅓ cup, depending upon whether you have chosen 1, 2, or 3 colors. Stir thoroughly and set aside. Repeat this procedure for each of your colors.

1 Color	Pale	Medium	Dark	Black
Dye powder	⅛ tsp (0.3 gm)	1 tsp (2.7 gm)	2 ¾ tsp (7.2 gm)	5 ¾ tsp (14.4 gm)
Urea Water	1 cup (250 ml)	1 cup (250 ml)	1 cup (250 ml)	1 cup (250 ml)

<b>2 Colors</b>	Pale	Medium	Dark	Black
Dye powder	1/16 tsp (0.15 gm)	½ tsp (1.4 gm)	1 ½ tsp (3.6 gm)	2 ¾ tsp (7.2 gm)
Urea Water	½ cup (125 ml)	½ cup (125 ml)	½ cup (125 ml)	½ cup (125 ml)

<b>3 Colors</b>	Pale	Medium	Dark	Black
Dye powder	Pinch (0.1 gm)	¾ tsp (0.9 gm)	1 tsp (2.4 gm)	2 tsp (4.8 gm)
Urea Water	⅓ cup (80 ml)	⅓ cup (80 ml)	⅓ cup (80 ml)	⅓ cup (80 ml)

**4. Make the warm Dye Activator solution.** Mix together the following ingredients and set aside.

1½ tsp (5 gm) PRO Dye Activator or Soda Ash

1 cup (250 ml) Warm to Hot 110°F to 130°F (43°C to 54°C) water

**5. Find a dye container** that holds about 1 quart (1 liter) of liquid. We've found that a rectangular plastic shoe box, an old roasting pan, a large mayonnaise jar or yogurt container work well. Dampen the 1 yard (1 meter) of fabric with 1 cup (250 ml) of warm 110°F (43°C) water. Now you can have fun scrunching, twisting, pleating or folding the fabric, in the dye container.

**6. Pour the prepared dye colors over the fabric.** If you want the colors to blend into one another, you need to press and mash the fabric. For a very mottled effect, don't touch the fabric.

**7. After 15 minutes, pour the warm Dye Activator or Soda Ash Solution** right over the top of the fabric. If you want the colors to blend more, change the folds of the fabric in the container.

**8. Let the fabric sit** for a minimum of 1 hour, up to 24 hours. The longer you let the fabric sit, the deeper the colors will be. If you are dyeing Turquoise or Black, let the fabric sit for the full 24 hours. Make sure the temperature of the room is at least 70°F (21°C).

**9. Rinse & wash.** Remove the fabric from the dye container and pour the exhausted dye down the drain. Rinse the fabric thoroughly in a bucket of room temperature 75° to 95°F (24° to 35°C) water. Change the rinse water 3 to 4 times. Wash in HOT 140°F (60°C) water, adding ¼ tsp (1.25 ml) Synthrapol per 1 yard (1 meter) fabric. Rinse well and dry. Dark colors and black may need a second HOT Synthrapol wash. If the rinse water is not clear, then wash it again in HOT water with Synthrapol.

For additional ways of using the Low Water Immersion process, call 1-800-2 BUY-DYE to order "Color By Accident" by Ann Johnston.

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