

## Immersion Dyeing in the Home Washing Machine using PRO MX Reactive Dyes

Please read directions carefully before starting

For *SOLID SHADE* garment or piece dyeing on Cotton, Linen, Rayon & Silk. Five to eight pounds of fabric can be dyed at one time in a top loading home washing machine. 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 not be used for food preparation.

### Supplies

PRO MX Reactive Dye powder  
 PRO Dye Activator or Soda Ash  
 Synthrapol  
 Metaphos (optional: Use if you have hard water.)  
 Non-Iodized Table Salt

### Fabric

5 pounds (2.3 kg) of dry fabric  
 = 15 adult medium T-shirts  
 OR 5 Sweatshirts  
 OR 20 yards Cotton Muslin

### 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. Prepare dye bath** by filling machine, without fabric in tub, on large load and warm setting, 105° to 110°F (40° to 43°C) water. When machine is full and water is agitating, add Salt and Metaphos (optional) from the chart below. Let machine agitate until salt is dissolved.

### Quantities for 5 pounds (2.3 kg) of dry fabric.

	Pale	Medium	Dark	Black
Salt	5 lb (2.3 kg)	7½ lb (3.5 kg)	10 lb (4.6 kg)	10 lb (4.6 kg)
Metaphos (optional)	1¼ tsp (9 gm)	1¼ tsp (9 gm)	1¼ tsp (9 gm)	1¼ tsp (9 gm)
Dye Powder	5 tsp (13 gm)	5 Tbl (38 gm)	10 Tbl (75 gm)	20 Tbl (150 gm)
PRO Dye Activator or Soda Ash	¾ cup (115 gm)	1½ cup (230 gm)	2¼ cup (345 gm)	2¼ cup (345 gm)

**3. Dissolve the dye.** Measure the desired amount from the chart above and thoroughly dissolve in 2 quarts (2 liters) room temperature water, 75° to 95°F (24° to 35°C) and add to washing machine.

**4. Let machine agitate** until thoroughly mixed. Then evenly distribute washed and still wet fabric around the tub. Start the machine and run for 15 minutes.

***It will take 60 to 90 minutes to run the dye bath. Please remember to adjust your machine dial as necessary so the dye bath does not go down the drain.***

**5. Set dye.** Thoroughly dissolve appropriate amount of PRO Dye Activator or Soda Ash, from the chart above, in 2 quarts (2 liters) warm water, 125° to 140°F (49° to 60°C). After machine has run for the 15 minutes pour in 2 cups (500 ml) dissolved PRO Dye Activator or Soda Ash through the spout marked for liquid bleach and run for 5 minutes. After 5 minutes add 2 more cups (500 ml) of PRO Dye Activator or Soda Ash solution through the liquid bleach spout and run for 5 minutes. Now add the remaining PRO Dye Activator or Soda Ash solution through the same spout and run the machine for 5 minutes.

If your machine does not have a bleach spout, then slowly pour PRO Dye Activator or Soda Ash solution into machine while it is agitating. DO NOT pour PRO Dye Activator or Soda Ash solution directly onto fabric or spotty dyeing may occur.

**6. Complete dyeing.** After running the machine for 5 minutes stop the machine for 5 minutes. Continue this alternate running and stopping for the next 60 minutes, extending the dyeing to 90 minutes when dyeing Black.

***It will take 60 to 90 minutes to run the dye bath. Please remember to adjust your machine dial as necessary so the dye bath does not go down the drain.***

**7. Rinse & wash.** Dyeing is complete after 60 minutes, or 90 minutes when dyeing Black. Let the machine continue on the automatic cycle through drain and all normal rinses. After the washing machine stops, reset the machine to HOT wash, 140°F (60°C) warm rinse and fill. Once filled, add 2 to 4 Tbl (30 to 60 ml) Synthrapol. Run the machine through a 12 minute wash, rinse cycle. After final spin, remove and dry. Very dark colors may need a second HOT wash.

#### **Technical Notes:**

- ◆ Dye baths cannot be stored or reused after PRO Dye Activator or Soda Ash has been added.
- ◆ If water is hard, include Metaphos in dye bath.
- ◆ It is important to make sure dye powder is dissolved thoroughly before adding to washing machine. If necessary use additional water to dissolve dye powder and strain dye liquor through layers of nylon stockings or cheesecloth.
- ◆ For even dyeing make sure fabric can move freely in washing machine.  
***Do Not Overload!***
- ◆ When working fabric 4 yards or longer check fabric frequently during dye cycle so yardage does not twist. Twisted fabric can inhibit dye from penetrating evenly on the fabric and leave spotty results. If fabric does get twisted, while wearing rubber gloves, untwist fabric during the 5 minute stop cycles. Periodically check for twisted fabric and untwist as necessary.
- ◆ When dyeing larger or smaller loads of fabric, proportionally increase or decrease quantities of chemicals, dye and water used. To adjust water, set washing machine for XL, M or S load according to amount of fabric dyed.