

# Immersion Dyeing using PRO MX Reactive Dyes

Please read directions carefully before starting.

*For Batik and Solid Shade dyeing on Cotton, Linen, Rayon and Silk. 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  
 Synthrapol  
 Metaphos (water softener): optional - use if you have hard water)

PRO Dye Activator or Soda Ash  
 Common Salt

## 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. Dissolve dye powder.** Measure the desired amount of dye powder, from the chart below, in 2 cups (500 ml) room temperature 75° to 95°F (24° to 35°C) water and set aside.

**For each pound (454 g) of dry fabric use:**

	Pale	Medium	Dark	Black
Dye Powder	1 tsp (2.5 gm)	3 tsp (7.5 gm)	6 tsp (15 gm)	15 tsp (45 gm)
Salt	1 lb (454 gm)	1½ lb (680 gm)	2 lb (900 gm)	2 lb (900 gm)
Dye Activator	5 Tbl (45 gm)	5 Tbl (45 gm)	7 Tbl (65 gm)	7 Tbl (65 gm)

**3. Prepare dye bath** by measuring 2½ gallons (10 liters) of room temperature 75° to 95°F (24° to 35°C) water for every pound (454 gm) of fabric into a large plastic, stainless steel, enamel or non-reactive metal container. Container should be large enough for the fabric to move freely and to stir the dye bath without spilling.

**4. Add salt** (see chart above) and 1 level tsp (7 gm) Metaphos (optional, water softener) to the dye bath and stir until dissolved. Add dissolved dye and stir. Add washed and damp fabric. Stir continuously for even results for 10 to 15 minutes, or do not stir for mottled results.

**5. Completely dissolve PRO Dye Activator or Soda Ash** from the chart above in 2 cups (500ml) warm 95°F (35°C) water. While wearing rubber gloves remove the fabric from dye bath and pour in the dissolved PRO Dye Activator or Soda Ash. Give it a stir and return the fabric to dye bath. Stir continuously for the first 5 minutes. Then, give a stir every 5 minutes for the next 60 minutes. This will insure maximum permanence and depth of shade.

- ✓ For even dye results, stir constantly during the first 30 minutes of the dye bath.
- ✓ To achieve a Deep Black, extend dyeing to 90 minutes after adding PRO Dye Activator or Soda Ash.

**6. Rinse & wash.** After 60 minutes (90 minutes, for black), dyeing is complete. Remove fabric from dye bucket and pour the exhausted dye bath down the drain. Rinse 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 ½ tsp (2.5 ml) Synthrapol per pound (454 g) of fabric. Rinse well and dry. Dark colors may need a second HOT Synthrapol wash. If the rinse water is not clear, then wash it again in HOT water with Synthrapol.

## TECHNICAL NOTES

PLEASE NOTE: When dyeing with Silk Black MX 610, increase the dye bath water temperature to 125F to improve the color yield. All other colors use 75-95F temperature water for the dye bath.

- ✓ Dye baths cannot be stored or reused after PRO Dye Activator or Soda Ash has been added.
- ✓ If your water is hard, include Metaphos in dye bath.
- ✓ It is important to make sure dye powder is dissolved thoroughly before adding to dye bath. If necessary, use additional water to dissolve dye powder and strain dye liquor through layers of nylon stockings or cheesecloth. Dye that is not dissolved before adding to dye bath will not continue to dissolve after being added to the dye bath.
- ✓ Non-iodized Salt is recommended. In most situations, salt with iodine can be used in place of Non-iodized Salt without altering dye results.
- ✓ Increase or decrease quantities in the above chart for larger or smaller amounts of fabric.