PRO Chemical & Dye

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Immersion Dyeing
using Liquid Reactive Dyes

Please read directions carefully before starting.

For Solid Shade dyeing on Cotton, Linen, Rayon, Tencel and Silk. Always do test samples before working on a large project. For additional information, visit our website at ***www.prochemical.com.***

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

Supplies

PRO Liquid Reactive dye
Pot Ash or Soda Ash
Common salt
Metaphos (optional; use if you have hard water)
Acetic acid 56% or white distilled vinegar
Synthrapol

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) Pot Ash or Soda Ash and ½ tsp (5 ml) Synthrapol per pound of fabric (454 gm, 3 to 4 yards cotton muslin, 8 yards 8mm China Silk, 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 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 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.

3. Add salt (see chart below) and 1 level tsp (7 gm) Metaphos (optional water softener) to the dye bath and stir until dissolved. Add the desired amount of Liquid Reactive dye from the chart below and stir. Add the washed and damp fabric. Increase the dye bath to 140°F (60°C). Stir continuously for 10 to 15 minutes for even results. Do not stir for mottled results.

For each pound (454 gm) of dry fabric use:

	Pale	Medium	Dark	Black
Common salt	1 lb (2 cups)	1½ lb (3 cups)	2 lb (4 cups)	2 lb (4 cups)
Metaphos (opt.)	1 tsp (7 gm)	1 tsp (7 gm)	1 tsp (7 gm)	1 tsp (7 gm)
25% Liquid Dye	2 tsp (10 ml)	2 Tbl + 1 tsp (35 ml)	6 Tbl (90 ml)	12 Tbl (180 ml)
33% Liquid Dye	1 ½ tsp (7.5 ml)	~3 ½ Tbl (27 ml)	4 ½ Tbl (67.5 ml)	9 Tbl (135 ml)
40% Liquid Dye	1¼ tsp (5.75 ml)	~1 ½ Tbl (23 ml)	3 Tbl (45 ml)	6 Tbl (90 ml)
50% Liquid Dye	1 tsp (5 ml)	~ 3 ½ tsp (18 ml)	~2 ½ Tbl (36 ml)	~ 5 Tbl (72 ml)

5. After the initial 10 - 15 minutes, completely dissolve ¾ cup (136 gm) of Pot Ash in 2 cups (500ml) warm 95°F (35°C) water. While wearing rubber gloves remove the fabric from the dye bath and pour in the dissolved Pot Ash. Give it a stir and return the fabric to dye bath. With intermittent stirring, keep the dye bath at 140°F (60°C) for 60 minutes. This will insure maximum permanence and depth of shade.

6. Rinse & wash. After 60 minutes, dyeing is complete. Remove fabric from dye pot 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.

7. Neutralize silk fabric in a bath that is made by adding 1 teaspoon (5ml) acetic acid 56% (11 teaspoons (55ml) white distilled vinegar) to every gallon (4 liters) of warm 105°F (41°C) water, for 10 minutes. Rinse fabric thoroughly in a bucket of room temperature 75° to 95°F (24° to 35°C) water. This step is only necessary when dyeing silk fabric.

8. Wash in HOT 140°F (60°C) water, adding ½ tsp (2.5 ml) Synthrapol per pound (454 gm) of fabric. Rinse well and dry. Dark colors may need a second HOT Synthrapol wash. If the rinse water is not clear, wash it again in HOT water with Synthrapol.