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Jacquard

# Liquid Procion H

## Painting, Printing or Stamping

To paint, print, or stamp with Procion Liquid H dyes you will need to dilute it with Chemical Water or mix it with a thickener paste. Chemical Water is also needed to make the thickener paste. Follow the directions below for the appropriate application that you would like to use.

### Step 1: Mixing Chemical Water

#### Mixing Chemical Water From a Print Base Kit

1. Open the Print Base Kit. The Kit will contain pre-measured amounts of Calgon, Urea, and Ludigol to make either 1 quart or 1 gallon of chemical water. Inside, it also contains a smaller packet of sodium alginate thickener which is added to the chemical water solution for applications requiring a thicker dye solution (hard edge painting, screen printing, etc.). Set the packet aside for mixing later (see Step Three).
2. To prepare 1 quart chemical water, stir the chemical water ingredients into 2 cups (500 ml) boiling water. Stir well.
3. After the chemicals are dissolved, add enough hot tap water to make 1 quart (1000 ml) and shake well. Plain chemical water may be stored indefinitely at room temperature. If you add sodium alginate to chemical water, label, date and store the solution in a cool dark place. Thickened solutions will keep about 3 weeks in this manner.

#### Mixing Chemical Water from Bulk Chemicals

Ingredients to make 1 quart (1 liter) for cotton, silk, or wool:

- Calgon - 1 tsp (4-5 grams)
- Urea - 3/4 cup (120 grams)
- Ludigol - 2 tsp (10 grams)

**Important:** When measuring bulk chemicals, wear a dust/mist respirator, goggles and protective gloves.

1. In a quart (liter) jar, stir Calgon, Urea and Ludigol into 2 cups (500 ml) boiling water.
2. After chemicals have dissolved, add hot tap water to make 1 quart and shake well. Chemical water may be stored indefinitely at room temperature.

### Step 2: Mixing Liquid Procion H Dyes

#### To Mix smaller amounts of dye to use immediately

1. Decide how many colors and how much of each color you will need (i.e. 2 oz. of 6 colors = 12 oz. chemical water.). See dye mixing charts and color mixing guidelines.
2. Mix up enough chemical water to mix your colors.
3. Figure out how much baking soda you will need for the chemical water. Completely dissolve the baking soda into a small amount of hot tap water and add to the chemical water. If you are painting on wool, omit the baking soda.
4. For each color, measure out the correct amount of chemical water / baking soda solution into a jar, cup or beaker. Reserve a container of chemical water / baking soda solution to lighten or make pastel colors.
5. Shake the Liquid Procion H dyes thoroughly and add the proper amount (for the shade of color) to the chemical water / baking soda solution. See dye mixing chart. The dye / chemical water / baking soda solution will keep for up to 1 month. For convenience and safety, clearly label and date dye solutions.
6. Stock solutions of dye can be thickened with sodium alginate thickener for screening, printing, etc.
7. Paint, screen or print dyes onto fabric, then allow fabric to dry completely.

#### To Mix Stock Solutions to be Stored and Used Later

Follow the mixing directions above, but skip step 3 (do not add baking soda to the chemical water). Just before using the dye stock solutions, dissolve baking soda in a small amount of hot tap water and add to the stock solution. Plain dye stock solutions without baking soda added can be stored for up to 6 months.

### Step 3: (optional) Mixing Sodium Alginate Thickener

For every 4 oz. (125 ml) of chemical water, add the following amounts of Sodium Alginate thickener to achieve these consistencies:

**Thin** - hand-painting: 1/2 tsp. (2 grams)

**Medium** - hard line edge painting, monoprinting, stamping: 1 tsp. (4 grams)

**Thick** - screen-printing, monoprinting, stamping: 1 1/2 tsp (6 grams)

1. Slowly sprinkle sodium alginate over chemical water (with or without dye added) and stir constantly for 10 minutes, or mix with a wire whisk until fairly smooth.
2. Let mixture stand for up to 1 hour to thicken and stir again. Label, date and store the mixture in a cool, dark place. It will keep about 3 weeks stored in this manner.

### Step 4: Steam Setting Liquid Procion H Dyes

We recommend steam setting Liquid Procion H dyes for the best results

#### Setting in a Fabric Steamer

1. Fabric must be completely dry before steaming. Roll painted fabric "sandwiched" in between unprinted newsprint paper, steaming paper, or light weight synthetic interfacing. The newsprint or interfacing should be wider than the fabric and extend beyond the fabric. Fabric should not come into contact with any other fabric surfaces or dyes may print off onto other areas. Smooth out any folds.
2. Steam fabric according to directions included with professional steamer. Steam time ranges from 30 to 45 minutes. If you are working with less than 3 yards of fabric, a lightweight material or silks, the steam time will be shorter. If you are steaming cottons, heavier weight fabric or more yardage, the steam time will be longer.

#### Setting by Steam Iron

For small pieces (up to 12" x 18"), iron fabric with a good steam iron on the proper setting for the type of fabric used for 10 minutes. An old steam iron may water spot fabric causing uneven color. This method is only effective for smaller areas of design, and is not recommended for yardage.

### Step 5: Rinsing Liquid Procion H Dyes

#### Rinsing by Hand

After the Liquid Procion H dyes have been steam set, rinse fabric in a bath of boiled water or the hottest tap water with 2 tsp. of Synthrapol detergent added for each gallon of water. For pastel colors, use half as much Synthrapol detergent. Repeat this step with darker colors. Continue to rinse in warm water until the water runs clear. Squeeze out excess moisture and hang to dry.

#### Rinsing by Washing Machine

Use the hot water cycle with 1/4 to 1/3 cup Synthrapol detergent added. Run through the entire wash, rinse and spin cycles. You may need to run at least 2 complete cycles. Hang fabric to dry.

**Note:** The damp fabric should not be left in a pile, or the dyes may bleed or print off onto any other fabric surfaces that are touched.

### Safety Considerations

- We do not recommend spraying with Liquid Procion H Dyes.
- Wear thin latex rubber gloves throughout preparation and painting procedures for safety and cleanliness.
- Store all dyes and chemicals in clearly marked and dated containers out of reach of children and pets in a cool dry place.
- Use all dye containers or utensils only for dyeing, never for food preparation.

### Technical Notes

- Use Toning Black 25% to tone and mix deeper shades.
- Deep Black 40% is best used to achieve a true deep black.
- Maximum saturation levels for Liquid Procion H dye concentrates are:
  - for 25% dye concentrate, 40 ml of dye per 125 ml chemical water
  - for 40% dye concentrate, 30 ml of dye per 125 ml chemical water
- When painting wool, omit baking soda.
- Silk painting: if layering colors in a watercolor style, decrease baking soda to 1/2 tsp. (2.5 grams) per 125 ml chemical water.
- Color Strength: All dye colors are of a similar mixing strength except for Brilliant Yellow, True Red and Toning Black, which are weaker.
- Primary Colors: To mix bright, clear colors, use Brilliant Yellow, Fuchsia, Turquoise and Blue Violet. To mix subdued colors, use Gold Yellow, True Red and Royal Blue.
- If you are using Presist as a resist, use unprinted newsprint paper when steaming. If the paper sticks to the softened Presist, it will easily wash out during the rinsing process.
- Oversteaming will not make colors brighter or more permanent. It may increase the chance of bleeding, backstaining or water spots.