**Direct Application on Nylon using WashFast Acid Dyes**

Please read directions carefully before starting.

*For SCREEN PRINTING, BLOCK PRINTING, STENCILING and HAND PAINTING on Nylon using thickened Dye Paint for pattern control. It is important to sample before working on large projects. For additional information visit our web site 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**
- WashFast Acid Dyes
- PRO Dye Activator or Soda Ash
- Synthrapol
- Ammonium Sulfate
- PRO Print Paste Mix F
- 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). 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 Print Paste.** Measure 5½ Tbl (55 gm) PRO Print Paste Mix F into a dry container. Measure 1 cup (250 ml) of warm 110°F (44°C) water into another container. Sprinkle measured PRO Print Paste Mix F into the water while stirring rapidly. Continue stirring until a smooth paste is obtained. Let paste stand 1 hour or overnight for smoothest results. Unused paste should be kept in a closed container. Store prepared print paste without dye up to six months, normally without refrigeration.

3. **Dissolve the dye.** Decide if you want a pale, medium or dark value. Measure the dye powder amount, according to the chart below, into a clean dry 1 cup (250 ml) measure. Dissolve the dye powder with ½ cup (125 ml) of boiling water and set aside until cool. Add ¼ tsp (1.25 ml) of Synthrapol to the dissolved dye. Then add 1 tsp (6 gm) of Ammonium Sulfate and stir thoroughly.

<table>
<thead>
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<th></th>
<th>Pale</th>
<th>Medium</th>
<th>Dark</th>
<th>Black</th>
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<tbody>
<tr>
<td>Dye powder</td>
<td>½ tsp (1 gm)</td>
<td>1¼ tsp (3 gm)</td>
<td>2½ tsp (6 gm)</td>
<td>6 tsp (15 gm)</td>
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4. Make the Dye Paint. The Dye Paint thickness described below is a guideline. Experiment until you get the thickness that suits your application needs.

<table>
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<tr>
<th>Hand Painting (thin paint)</th>
<th>Screen printing, Block printing, and Stenciling (thick paint)</th>
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<tr>
<td>Thicken the dissolved dye with the prepared Print Paste, usually 1 to 2 tsp (5 to 10 ml), then add water to make 1 cup (250 ml). Stir until thoroughly mixed.</td>
<td>Add enough prepared Print Paste to the dissolved dye to make 1 cup (250 ml). Stir until thoroughly mixed.</td>
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5. Apply the dye paint. Paint or print the fabric and let it air dry. After the fabric is dry, then you are ready to steam. 

**NOTE:** Leftover dissolved dye can be stored for a minimum of 6 months.

6. Set the dye using the canning kettle method. The pot or canning kettle must be deep enough to hold the wrapped fabric and wide enough so that the fabric bundle does not touch the sides of the pot. Invert the wire basket or bottle rack and place it in the bottom of the kettle. This serves as a platform for the bundled fabric to rest.

Make sure your painted or printed fabric is dry. Loosely roll the fabric, jelly roll fashion, in between a piece of muslin, cotton sheeting, Pellon, blank newsprint, or kraft paper, so the patterned surface does not come in contact with itself. Then roll the tube lengthwise, like a cinnamon roll, and loosely tie it to secure this shape.

Place the fabric bundle on top of the inverted wire basket. Wrap a towel around the lid of the canner to absorb condensed steam. This protects the fabric bundle from droplets of water falling back onto the bundle, which causes bleeding of the dyes.

Put water in the bottom of the steamer. Make sure the water is up to, but does not touch the bottom of the wire platform where the fabric bundle sits. Turn on the heat and once the water is boiling and is producing a good head of steam, place the bundle in the kettle. Set the timer for 30 minutes for pale shades and up to 60 minutes for black or dark shades. Check the amount of water periodically and add boiling water as necessary. The steam time also varies depending upon the type and weight of the fiber.

7. Rinse the fabric in a bucket of room temperature 75° to 95°F (24° to 35°C) water containing 1 tsp (3 gm) of PRO Dye Activator or Soda Ash for each gallon. This rinses off the unfixed dye and lowers the tendency of the dye to stain un-printed areas.

8. Wash 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). Rinse thoroughly in room temperature 75° to 95°F (24° to 35°C), changing the water 2 to 3 times. Remove excess water and dry.

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