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DIRECT APPLICATION OF PROCION MX® DYES FOR PAINTING AND PRINTING

see Ann's book, *Color by Design: Paint and Print with Dyes, 2nd Edition* for all paint and print techniques on cotton, linen, rayon, and silk

Step 1: Prepare fabric.

Only if necessary, scour the fabric by machine washing for 15 minutes:

Hot water	140° F (60° C)
Soda ash	1/2 tsp (2.5 ml) per 1 lb (455 g) fabric
Synthrapol SP	1/2 tsp (2.5 ml) per 1 lb (455 g) fabric

Soak dry fabric in soda solution until it is thoroughly wet—5 to 20 minutes.

Warm	1 gallon (3.8 liters)
Soda ash	9 Tbs (135 ml)

Step 2: Prepare print paste (**Short Cut using premeasured mix:** Add 5 ½ Tablespoons(80 ml) Print Paste Mix SH to one cup (240 ml) warm water. Stir continuously while adding dry ingredients.)

OR mix from scratch: adding ingredients in following order

Warm water	3 cups (720 ml)
Granular urea	6-1/2 Tbs (98 ml)
Metaphos	1-1/2 tsp (7.5 ml)
Optional: Ludigol	2 tsp to 4 tsp (10 ml to 20 ml)
Sodium alginate SH	6 tsp (30 ml)
Optional: extra sodium alginate	Up to 2 tsp (10 ml) more
Additional water	To make a total of 1 quart (960 ml)

Step 3: Prepare the urea water. Use to thin the print paste as needed.

Warm water	1 cup (240 ml)
Granular urea	7 tsp (35 ml)

Step 4: Prepare dye concentrates. Warm water, not over 95°F (35° C)

Warm water	1 cup (240 ml)
Urea	2 Tbs to 4 Tbs (15 ml to 30 ml)
Dye powder (<i>double for black</i>)	2 Tbs (30 ml)

Step 5: Prepare colors by combining dye concentrate with print paste and/or urea water.

Equal parts make a dark value.

Use less dye concentrate for lighter colors and more for very dark colors.

Step 6: Apply the colors (dye concentrate with print paste and/or urea water) to soda-soaked fabric. Use any surface design technique you choose (see Chapters 4 to 8, *Color by Design*).

Step 7: Cure fabric open or covered, flat or rolled.

Time	4 to 8 hours
Temperature	70° F to 110° F (21° C to 43° C)
Moisture	Almost dry to the touch or very wet

Step 8: Wash out excess dye. Wash in warm water and Synthrapol. **Final wash hot: 140° F (60° C).**

Hand wash	1 tsp (5 ml)
Machine wash	1 Tbs to 4 Tbs (15 ml to 60 ml)

Test for wash fastness by ironing washed fabric (while it is still wet) on clean white cotton.