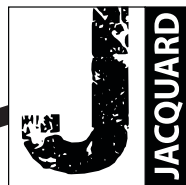




artigina



Procion® MX

Instructions

Read through all instructions before beginning your project.



Remember that these techniques discussed here are only suggestions and a quick reference. There are a number of variations and possibilities when using dyes. You will find further examples at <http://www.jacquardproducts.com/projects>. Experimentation is the best method.

Immersion Dyeing

There are 11 standardized colors (see hints and tips for list) in the Procion MX line. All other colors, no matter the manufacturer, are mixed formulas of two or more of these standardized colors. We offer a broad range of colors for your convenience, but the ultimate dyer only needs to stock the standardized colors.

Immersion or tub dyeing is submerging the fiber being dyed in the dye bath containing water, a specific amount of dye and the appropriate chemical assistants for a specific length of time. For smooth, even color, the dye bath must be stirred frequently. A large enamel or stainless steel container or plastic bucket can be used for holding the dye bath.

Stirring Fiber Reactive Dye Baths

For even, smooth color, the fiber should be able to move freely in the dye bath. Additional water in the dye bath will dilute the dyes more than necessary and decrease the shade and increase the dyeing time. Increasing the volume of the dye bath requires the dye time to be longer for the dye molecules to reach the fiber. To prevent uneven dyeing stir dye bath frequently (every 2 to 5 minutes). To stir fabric, wear rubber gloves and lift the fiber from the dye bath. Unfold the creases, and return the fiber to the bath in a different configuration. To stir yarn, use two stainless steel, Plexiglas or wooden stir sticks. Gently slide one stick into the skein near a cross-tie and lift above the dye bath. With the other stick, pick up a different point of the cross-tie on the skein. Remove the first stick and use that stick to redirect the yarn back into the dye pot in a different pattern.

General amounts of dye, salt and soda ash per 11,36 liters (3 gallons) of water and one pound of fabric:

- **For very pale shades:** ¼ to ½ teaspoon dye, 1½ cups salt, ¼ cup soda ash
- **For light shades:** ½ to 1 teaspoon dye, 1½ cups salt, ¼ cup soda ash
- **For medium shades:** 1 tablespoon dye, 1½ cups salt, ¼ cup soda ash
- **For darker shades:** 2 tablespoons dye, 2 cups salt, ¼ cup soda ash
- **For darkest shades:** 4 tablespoons dye, 3 cups salt, ⅓ cup soda ash

Immersion Dyeing Cellulose Fibers

For 454 g (1 pound) dry weight of fabric or fiber

Materials:

- 11,36 liters (3 gallons) of warm water (40°C)
- Procion® MX dye (see above in for amounts)
- ¼ to ⅓ cup of soda ash
- 1½ to 3 cups of salt (non-iodized)
- Synthrapol® for prewashing and post-rinsing

Two methods of dyeing follow:

Be sure to prewash fabric to remove any dirt, grease or sizing. We suggest using Synthrapol®.

Method One:

1. Fill container (such as a 19 liters (5 gallons) plastic bucket) with 11,36 liters (3 gallons) of warm (40°C) tap water. Add salt and dye in proportions listed in the general dye amounts above.
2. Add the fabric or fiber.
3. Stir frequently for 10 to 15 minutes.
4. Remove or lift up the fabric.
5. Add the soda ash. (It helps to dissolve the soda ash in a separate container in a little hot water first.) Stir into dye bath.
6. Put the fabric back into dye bath and stir frequently for 30 to 60 minutes, (depending on the depth of intensity desired).

Rinsing:

- While wearing gloves, rinse the dyed fiber first with cool water, then with increasingly warmer water.
- After 3 or 4 rinses, when the water is nearly clear, prepare a soap soak. Use 7,5 to 11,36 liters (2 to 3 gallons) of very warm tap water and 1½ teaspoons of **Synthrapol®**. The fiber should sit in this soap bath for 5 to 10 minutes.
- Rinse 3 or 4 additional times with warm water.
- Using *Rit Color Stay fixative* during the initial rinse will further ensure long lasting colors.

Method Two:

1. Fill container with 11,36 liters (3 gallons) of warm (40°C) tap water, add dye and stir.
2. Add the fabric or fiber.
3. Add the salt in 3 equal parts at 5 minute intervals. If dyeing a deep shade of blue or a full black, use twice the amount of salt, (adding it in 2 equal parts at 15 minute intervals) while still stirring the dye bath frequently.
4. Add the soda ash in 2 equal parts at 15 minute intervals, while still stirring the dye bath frequently. (It helps to dissolve the soda ash in a separate container in a little hot water first.)
5. Dye for 30 to 60 minutes after the last soda addition.

Rinsing:

- While wearing gloves, rinse the dyed fiber first with cool water, then with increasingly warmer water.
- After 3 or 4 rinses, when the water is nearly clear, prepare a soap soak. Use 2 to 3 gallons of very warm tap water and 1½ teaspoons of **Synthrapol®**. The fiber should sit in this soap bath for 5 to 10 minutes.
- Rinse 3 or 4 additional times with warm water.
- Using Rit Color Stay fixative during the initial rinse will further ensure long lasting colors.

Hints & Tips for Dyeing with Procion MX Dyes

Safety Considerations

- Always wear rubber gloves.
- Wear a dust mask or respirator when working with dry powders. Inhaling the dye powder or soda ash in large quantities may cause serious health problems.
- Use measuring cups, spoons and utensils for dyeing only. Don't mix with kitchen utensils.

Standardized Colors

There are 11 standardized colors in the Procion MX line. All other colors, no matter the manufacturer, are mixed formulas of two or more of these standardized colors. We offer a broad range of colors for your convenience, but the ultimate dyer only needs to stock the standardized colors.

Standardized Color List:

- PMX004 – Lemon Yellow
- PMX020 – Brilliant Orange
- PMX034 – Magenta
- PMX040 – Fuchsia
- PMX068 – Turquoise
- PMX070 – Cerulean Blue
- PMX072 – Medium Blue
- PMX076 – Cobalt Blue
- PMX128 – Warm Black
- PMX231 – Violet
- PMX232 – Bright Blue

Dyeing with Procion MX Dyes

- Dye spilled on surfaces can be cleaned with bleach or household cleansers.
- Use a hand cleaner to remove dye from skin. Do not use bleach since it dissolves protein (like your skin!).
- For an even take-up of dye in immersion dyeing, soak the fiber in clear water for at least 15 minutes to wet completely. If the fiber has been washed, do not dry, move directly to dyeing.
- **Synthrapol**[®] is a more effective washing agent than regular soap, especially when turquoise, fuchsia and any color mixes containing these dye colors are used. These colors require increased time and care in washing out the excess dye. Often several hot soap soaks are necessary.
- Mix powdered dye with a small amount of water to form a paste when dissolving. After all lumps are removed, gradually add more water until the dye is thoroughly dissolved. For quicker pasting, add 2 drops of **Synthrapol**[®] before adding the water.
- Because of the nature of dyestuffs (some being denser than others) dye colors will vary in volume when measured by weight. One may certainly measure by volume (by the teaspoon or tablespoon), however, if you intend to recreate specific tones or hues we recommend measuring by weight.
- Altitude, water quality (mineral or chlorine content), humidity, dye bath temperature, brand and purity of vinegar and/or soda ash can all influence the dye process. Perfume, whiteners and brighteners in household detergents and soaps can totally change the dye color. Two seemingly identical runs can have quite different results if any of these variables change.

Rinsing Procion MX Dyes

For wool or other fibers that may felt use only cool water in each rinse as well as the soap soak. Gentle handling during rinsing is also important to reduce the possibility of felting.

1. While wearing gloves, rinse the dyed fiber first with cool water, then with increasingly warmer water.
2. After 3 or 4 rinses, when the water is nearly clear, prepare a soap soak. Use 2 to 3 gallons of very warm tap water and 1½ teaspoons of **Synthrapol**[®]. The fiber should sit in this soap bath for 5 to 10 minutes.
3. Rinse 3 or 4 additional times with warm water.
4. Using Rit Color Stay fixative during the initial rinse will further ensure long lasting colors.