

PROCION 9 DYEING METHODS

Fabrics which can be dyed : natural fibres (cotton, linen, wool, silk, hemp, viscose rayon)

Fabrics which cannot be dyed : Polyester, Acrylic , Nylon

Mixtures of natural and synthetic fibres can be dyed but will be paler.

THE STRENGTH OF COLOUR WILL DEPEND ON:

Fabric Composition: Cellulose & Silk will dye better than others

Quantity of Dye: The more dye you use, the stronger the colour intensity

Colour of the Fabric: If the fabric is pre-dyed, the original colour will affect the end colour result.

New Fabric: Wash new fabric in hot water to remove any sizing

Temperature: To get the best possible result dye 30°C

Fabric Weight: For correct result weigh the fabric you wish to dye

Length of Time: The longer fabric is dyed, the stronger the colour result

50gms of **PROCION** will dye 1KG of dry weight of fabric/fibre.

5gms (1 teaspoon) **PROCION** will dye 100gms of dry weight of fibre.

SODA ASH: 5gms per litre for pale shades & 10gms per litre for heavy shades.

SALT: 50gms per litre of water in dyebath – Cooking Salt (not iodised)

The above quantities will give you good strong colours. If you require paler shades use 1/10th of the amount of dye required for a full shade.

WE RECOMMEND YOU WEAR GLOVES AND WORK IN A WELL VENTILATED AREA

**** DYES MUST BE USED WITHIN 2 HOURS ONCE THEY ARE MADE INTO SOLUTION AND CANNOT BE STORED AS THEY GRADUALLY LOSE STRENGTH**

1.HAND DYEING

1. Place your fabric in a bucket, laundry trough or any large plastic container.
2. Measure enough tepid water into your dyepot to cover the fabric.
3. For every litre of water in the dyebath, you need 50gms of Salt.
Dissolve the salt and dye in hot water and add to dyebath, stirring well.
4. Add fabric and stir again.
5. Leave to stand for 30 – 40mins, stirring regularly to avoid unevenness.
6. When fabric is dark enough, dissolve Soda Ash (@ 5-10g/Ltr) in hot water and add to dyebath. Stir well. This fixes the dye on the fabric.
7. Leave to stand for 30 – 40mins, stirring regularly.
8. Remove fabric from dyebath, squeeze out excess liquid and wash thoroughly in hot, soapy water, then rinse until water runs clear
*** Steps 5 & 6 can be done at the same time but will produce weaker colours

2.PRESOAK METHOD

1. Dissolve 20gms per litre of SODA ASH in warm water
2. Soak fabric in SODA ASH solution
3. Squeeze out excess liquid and dry fabric
4. Make up dye solution at 2 teaspoons per litre
5. Immerse fabric and allow to sit for 40mins
6. Remove, wash and rinse well.

3.CRAMJAR

1. Presoak the fabric as for Presoak Method.
2. Dissolve 1 teaspoon of dye powder in 50 – 100mls warm water
3. Make up 3 colours this way
4. Cram fabric into a tall, narrow jar
5. Pour over one of the dye solutions
6. Cram another piece of fabric on top of the first and pour over second colour solution
7. Repeat this process with a third colour and more fabric
8. Leave to stand for 30 mins before rinsing thoroughly in warm soapy water

4.HANDPAINTING

PROCIONS can be made up into a solution for painting on cotton or silk. THESE SOLUTIONS WILL NOT BE STABLE FOR MORE THAN 4 HOURS

1. Dissolve 100gms Urea, 5gms Resist Salt 200% & 10gms*** Soda Ash in 900mls of warm water.
2. For full strength dye solutions, dissolve 5gms PROCION powder thoroughly in 100mls of chemical solution.
3. Add a small amount of meths or Dettol to preserve the dye.
4. Dye solutions should be stored in an airtight bottle in a cool dark place.
5. Paint onto fabric using a brush and Gutta or Wax as a resist.
6. Allow to dry
7. Wrap in butchers paper or scrap cotton shirting
8. Steam for 40mins or Air cure for 24 hours.
9. Wash off unfixed dye using Hitech or Synthrapol
10. *** WHEN PAINTING ON SILK ONLY USE 5GMS SODA ASH TO 900MLS WATER.
11. For Chemical solution may be made and mixed with dyes as you need them instead of premixing dye solutions.

5.DIRECT PRINTING WITH PROCIONS

PROCIONS can be used for Direct printing or Polychromatic Printing ON COTTON , SILK or PAPER

Dye always needs to be printed through a screen meshed with 77T.

For Direct printing the dye is added to the print paste, squeegeed through the screen , air cured or steamed for fixation.

You will first need to make up a neutral alginate paste.

PRINT PASTE RECIPE:

50-60gms Manutex F

100gms Urea

5gms Resist Salt L 200%

10gms Soda Ash (halve for use on silk)

Methylated Spirits

1. Paste Manutex powder with a little Methylated Spirits to coat the granules.
2. Stir in 100gms Urea, 10gms of resist Salt and Soda Ash if needed.
3. Add 900mls of warm water stirring rapidly with a large spoon or spatula.
4. Continue stirring until mixture starts to thicken.
5. Dissolve 5gms (1 teas) dye in hot water and add to 100gms of Manutex Paste.
6. Squeegee through screen or handpaint onto fabric.
7. Allow to dry, then steam for 40mins or air cure for 24 hours wrapped in plastic.
8. Wash out excess dye in warm soapy water. Soaking the dyed fabric in Dynazol Wash Off or Mesitol NBS will help reduce washing and rinsing. Rinse till water runs clear.

6.POLYCHROMATIC PRINTING WITH PROCIONS

Polychromatic Printing allows you to paint a design onto a silk screen then transfer it using a neutral alginate paste onto

the fabric or paper. Traditionally you will only get one full strength print from a painted screen but a second print is possible which will be somewhat paler. 'Breakdown Printing' is based on this method by using stronger dye solutions which 'break down' each time you print through the screen, giving fantastically random & vaguely related designs.

1. Dissolve 5gms (1 teas) Procion Dye in 50mls of hot water. Each colour of your design is dissolved in this way.
2. Paint your design onto a silk screen with dye solutions and allow it to dry (this may be kept and printed at a later date).
3. Using the Manutex Print Paste, the dyes are then transferred onto fabric with a squeegee.
4. A second print may be attempted but will be a lot weaker.
5. Refer steps 7 & 8 for DIRECT PRINTING.

7.SPIRAL DYEING

Spiral dyeing silk tops can be done with Procions or Landscapes dyes. Work with maximum 3 colours on a plastic sheet. You will also need a bamboo steamer to fix the dyes and rubber brayer to work the dye into the fibre.

1. Make up a solution of 1/2 teaspoon per litre of Soda Ash.
2. Carefully soak 25gm silk tops in this solution.
3. Squeeze out excess solution and lay silk tops lengthways along plastic sheet
4. Make up 3 dye solutions @ 5gms to 100ml hot water. Make sure dye is thoroughly dissolved
5. Pour dye solution across silk tops sparingly 1 colour at a time, using the rubber brayer (roller) to work the dye into the fibre. Make sure fibre is completely covered in dye to avoid white areas.
6. Work colours in to fibre the full length of the tops, overlapping each different colour. AVOID AN EXCESS OF DYE SOLUTION.

7. Gently roll tops in plastic sheet and place into a bamboo or dim sim steamer.
8. Steam for 30 mins. Rinse gently in warm water with a little Dynazol Wash Off.

8.SQUEEZE BOTTLES

Using the dye in squeeze bottles enables you to apply several different colours at the same time for multi coloured tie dye methods. Once dyes are made into solution they must be used within 2 hours.

1. Using a 250ml squeeze bottle you will need 15gms (3 teas) dye.
2. This can be mixed with hot water, chemical water or Dye Activator.
3. Chemical water is made with 100gms Urea per 900mls hot water
4. Dye Activator can be purchased from Kraftcolour and makes a slightly thickened dye solution which gives you much sharper patterns and prevents excessive bleed of colour.
5. We recommend presoaking the fabric before using this method. (see method 2 above)
6. Make up dye solutions and squeeze onto the fabric (3 colours is usually enough)
7. Wrap in plastic and allow to cure overnight
8. Rinse out excess dye using Dynazol to prevent backstaining of white areas.

9.ICE DYEING

This technique is great for amazing random dyed patterns on cotton and silk. By covering fabric in ice cubes and sprinkling it with Procion dye powders, when the ice melts, the dye gradually seeps into the fabric.

1. Prewash your fabric first to remove any starch or finishes.
2. First you will need to make up a Soda Ash Solution – 20gms per 1ltr water.
3. Presoak the fabric for at least 15 mins to allow it to thoroughly soak in. Pull it out and squeeze out the excess solution. The Soda Ash solution can be kept and used again.
4. Place a cake rack in a shallow tray and arrange the fabric on it. Scrunch it, fold it, pleat it or tie it. Completely cover the rack with fabric.
5. Next cover the fabric in a layer of ice cubes or crushed ice. Any areas of fabric which are not covered in ice will remain white – crushed ice makes it easier to get full coverage.
6. Choose your dye colours and start sprinkling them on the ice (wear a mask when dealing with dye powders). Start with your first colour - you can put the dye where ever you like, as the ice melts the dyes will blend and spread so keep this in mind when choosing your palette. Some dyes may split into their different components which will add to the patterning.
7. When you have finished sprinkling the dye powders, cover the tray with plastic and allow it to sit for 24 hours to penetrate and fix on the fabric.
8. The next day your fabric may look like a muddy mess but once it's rinsed the patterning will be revealed.
The liquid from the melted ice should be sitting under the rack so it will not be touching the fabric.
Rinse well first with Dynazol Wash Off, in hot soapy water and then in warm water until it runs clear.