

## How to FABRIC DYE WITH PROCIONS

04/05

### Pure Concentrated Colours for Fabric Dyeing

PROCION CONCENTRATED FABRIC DYES FOR:  
COTTON, CALICO, SILK, LINEN, VISCOSE, RAYON, FLAX, HEMP, PAPER ETC.  
(Also for Cotton/Polyester mixes to lighter shades)

#### TRADITIONAL METHOD – (Exhaust dyeing)

1. Weigh fabric – dry weight, then thoroughly wash, rinse and leave damp.
2. Measure 2 litres of tepid water (40 degrees C) for every 100gms of fabric into a bucket or bowl (dye bath).
3. From the table below, take the required amount of dye and pdv salt, stir into dye bath until fully dissolved.
4. Immerse damp fabric and dye for 30 minutes, moving the material through the liquid every few minutes to ensure even dyeing.
5. Weigh fixer and pre-mix in a small quantity of hot water and when dissolved stir into dye bath being careful not to let the concentrated solution in direct contact with the fabric, i.e. remove first if possible.
6. Continue dyeing for 30 minutes (pastel shades), 45 minutes (deep shades) – check for shade required.
7. Remove fabric from dye bath, cool rinse until clear, then very hot wash until clear of all unfixed dye – then dry and iron. Colperse can be used to assist with dye removal.

#### APPROXIMATE SHADE GUIDE PER 100GMS. FABRIC IN 2 LITRES OF WATER

	Dye gms.	PDV Salt gms.	Fixer gms.
Pastel shade	1-3	60	10
Medium/ Deep shades	3-5	80	20

### EASY DYE TECHNIQUES – QUICK WAYS WITH COTTON

Also for tray dyeing e.g. yarns and skeins etc.

Method for dyeing coloured fabrics (\*for black – see separate instructions) – A quick and easy process producing first class results. For ease of working amounts are based on dyeing 50gms of fabric in 1 litre of water i.e. (for every gm of fabric you will need 20ml of water). Obviously when dyeing larger or smaller amounts the quantities of water, dye, urea, pdv salt and fixer should be increased or decreased proportionately.

1. Weigh fabric dry weight, then thoroughly wash, rinse and leave damp.
2. Measure 1 litre tepid water (40 degrees c) into a bucket or bowl (dye bath) and from the table below add first the amount of dye followed by the urea and pdv salt, dissolving each one before adding the next.
3. Dissolve the required amount of fixer in a small quantity of hot water and, when ready to commence dyeing stir into dye bath.
4. Immerse fabric in dye bath and dye for 30 minutes, moving the fabric through the liquid every few minutes to ensure even dyeing.
5. Remove fabric from dye bath and gently squeeze out excess liquid (use gloves), open out fabric and make into a loose roll, transfer to a plastic bag being sure to exclude air and leave for a minimum of 2 hours – preferably 24 hours. Then cold rinse followed by hot soapy washes until clear of unfixed dye. Dry and iron.

NOTE: Pastel shades will be available after dyeing for 15 minutes and deeper shades after 30 minutes – If required, simply remove from dye bath and wash etc as normal.

Approx Quantities- per litre of water- 50 grms fabric @ 20-1

	Dye gms.	Urea gms.	PDV Salt gms.	Fixer gms.
Coloured fabric	10	10	40	20

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## \*Methods for dyeing BLACK

The Easy Dye technique is the recommended method for dyeing fabrics black. Using the amounts shown below proceed as follows:-

### Method A for dyeing black

1. Weigh fabric – dry weight then thoroughly wash, rinse and leave damp.
2. Measure 1 litre of recently boiled water, for every 50gms of fabric, into a bucket or bowl (dye bath) and from the table below add first the amount of dye followed by the urea and pdv salt, dissolving each one before adding the next.
3. Dissolve the required amount of fixer in a small quantity of hot water. When ready to commence dyeing, stir into dye bath and use immediately.
4. Immerse fabric in dye bath, occasionally moving the fabric through the liquid for the first 40 minutes, then cover dye bath and leave for 24 hours.
5. Remove from dye bath, cold rinse until clear, then hot detergent wash, rinse and dry.

### Method B for Dyeing BLACK (alternative method)

1. Using a metal (stainless or enamel) container proceed as at 1 and 2 above (Method A).
2. Immerse fabric in dye bath and dye for 30 minutes, then raise the temperature to 60 degrees C and maintain for 60 minutes, moving fabric through liquid occasionally.
3. Remove from dye bath and finish as normal.

Approximate Quantities- per litre of water- 50 grams fabric (20-1)

	Dye gms.	Urea gms.	PDV Salt gms.	Fixer gms.
Black	15	15	60	25

## EASIPRINT AND DECORATIVE EFFECTS BY SIMPLE PRE-TREATMENT OF FABRIC

Pre-treatment of fabric with fixer has the advantage of enabling a range of colours to be mixed which without the addition of fixer allows them to be stored (at a cool temperature) for several days.

### Method 1 –

1. For Tie and Dye – Fabric can be folded, twisted, knotted, or pleated and then tied. Dissolve 20 gms of fixer in 1 litre of hot tap water and soak fabric in solution for a few minutes, when saturated, remove and squeeze out excess liquid and dry.
2. Into 150 ml (approx. 1 cupful of hot water) dissolve 10 gms (2 teaspoons) of urea and add 10 gms dye – or more according to shade required. Premix as many colours as needed in this way. Apply to the tied fabric by brush, sponge, squeeze bottle or dip dyeing.
3. When finished seal fabric in a plastic bag to prevent drying out and leave for a minimum of 4 hours, but preferably 24 hours. Whilst still tied, rinse out excess dye, untie and hot wash until clear.

### Method 2 – Using a plastic tray –

For intense bursts of colour sprinkle MX dyes onto tied, soda soaked fabric (left damp). For additional effects use fabric which has previously been dyed. Finish as Method 1.

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## TEXTILE PRINTING –EASIPRINT METHOD

Pre-treat the fabric as follows:-

Cotton – Dissolve 20gms of soda ash in 1 litre of warm water.

Silk – Dissolve 10 gms of soda ash in 1 litre of warm water.

Immerse fabric in liquid and allow to soak for a few minutes – Remove, squeeze out and allow to dry. When dry iron using low setting.

Prepare the following:-

5 to 10gms dye – according to colour strength required plus 20gms urea. Dissolve the dye in 100 mls of tepid water, then stir in and dissolve the urea. A range of colours can be prepared to the above formula for multi-coloured painting or printing.

Print Paste – The thickener Manutex should be prepared as a stock solution by stirring approximately 100 gms into 1 litre of tepid water, an electric mixer will speed the process. Leave for 10-15 minutes before using. The print paste may now be added to the various dyes already prepared and adjusted with more paste or water to obtain the consistency needed for the particular printing or painting requirement. To fix the design use any of the following methods:-

1. Allow the fabric to dry slowly overnight then give a final fixation with a hot iron 120 degrees C for 5 minutes.
2. Dry the fabric (a hair dryer could be used to accelerate the drying) then either bake for 5 minutes at 150 degrees C or hot iron for 5 minutes at 150 degrees C. To finish cool rinse at 40 degrees C until clear. Adding Colperse at 5 mls. per litre of water will greatly assist the removal of unfixed dye.

Salt – “PDV” or “Domestic”

Salt is a very important ingredient of most dyeing systems enabling dye to move out of the liquid onto the fabric. Whilst domestic salt can be used it might well be iodised and also contain other salts which will adversely effect the result, therefore Pure Vacuum Dried Salt should always be used for consistent and reliable results.

Colourcraft Soda Ash Fixer or Washing Soda

Colourcraft Soda Ash is chemically pure and of constant strength whereas washing soda can vary in strength by up to 50% and can also contain various other chemicals. This makes it difficult to calculate exactly how much is being added when dyeing fabric and this will have an adverse effect on the result.

## SAFETY IN USE

Care should be taken when handling all dyes/associated chemicals – FACE MASKS, RUBBER GLOVES AND PROTECTIVE CLOTHING MUST BE WORN. Precautions MUST be taken to avoid accidental ingestion, inhalation and skin and eye contact. Keep containers closed and away from children. Information contained in this publication or as otherwise supplied is believed to be accurate and is given in good faith, but without guarantee as we have no control over conditions of use and individual application.

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