



Introduction

Dyeing your own yarn is a fantastic way to develop your understanding of colour as well as to create genuine, “one-of-kind” pieces. Hand-dyeing can add excitement and interest even to the simplest of patterns and the process is not difficult or time-consuming.

For this lesson, I have provided instructions for using procion MX dyes as these are both versatile and widely available. Should you prefer to use a different dye product, simply follow the instructions for the dye of your choice and continue accordingly. You will be dyeing 2 skeins of yarn, one in a single colour, the second using a multi-colour technique of your choice, developing the work you did on colour in module one.

Dyeing with Procion MX dyes

Please read all the instructions and health & safety guidelines on page 5 carefully before starting to use your dyes.

Procion MX dyes come in an excellent range of colours and are incredibly versatile. For the beginner dyer, or if you are looking to progress from simple food colours to a more flexible dyeing process, they are an ideal choice for hand-dyeing. Procion MX dyes will readily colour practically any natural fibre, including wools, silk, cottons and the new bamboo, casein and soy fibres. Use them on yarns, fabric, felt, fleece and even paper! They will also dye viscose and rayon beautifully.

Normal household salt and white vinegar (or citric acid) are added at the soaking stage to fix the dye to animal fibres. For plant fibres, salt and sodium carbonate (washing soda crystals) are used to make the dye permanent. Animal (protein) fibres need to be “cooked” to complete the fixing process. Plant (cellulose) fibres, on the other hand, need no heat at all and are simply left for a few hours to set. This is particularly useful for paper and other fibres which may be damaged by heating.

To get you started you will need:

- Procion MX dyes (be sure to ask for MX, the cold water type)
- For animal (protein) fibres - salt and white vinegar or citric acid
- For plant (cellulose) fibres - salt and sodium carbonate (washing soda crystals)
- Gloves, apron and newspapers to cover surfaces
- A squirt of washing up liquid
- Water
- Plastic bucket for soaking yarn
- Stirring stick: glass, plastic or wood
- (For dyeing multi-coloured skeins) several containers to hold the dye solutions: Squeezy “sports” bottles are ideal; alternatively, jam jars, well-rinsed plastic milk bottles or plastic cups are fine.
- For animal fibres, flat-bottomed microwaveable container/s with lid, large enough to comfortably hold the yarn
- For plant fibres, any flat-bottomed container (not aluminium) or cling film
- Teaspoon
- Measuring jug
- Access to a microwave to set the dye with animal fibres (see note below if you do not have access to a microwave)
- Sticky labels for dye solution bottles
- Notebook (optional): for recording your methods and results for use in future projects

General dyeing instructions

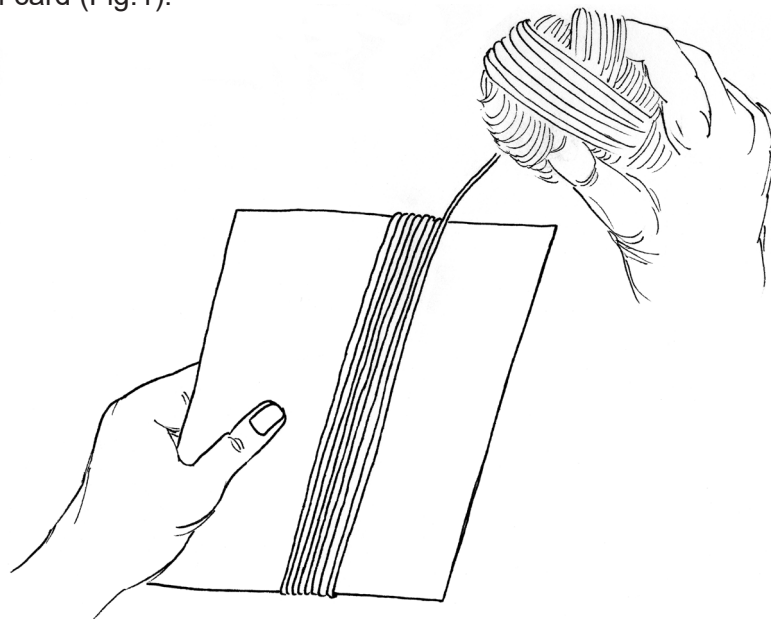
Procion MX dye powders are very easy to use, however, there are a few basic safety guidelines to follow (see below). There are just three simple stages in the dyeing process and armed with these basic instructions you will soon be off on your own colour adventure!

Prepare your yarn

- i) Yarn is wound into a large loop called a “skein” (or “hank”) which helps the dyes reach all parts of the yarn most easily. The number of skeins you make will depend on how many different colours/colour combinations you want in your final design and also how thick the yarn is. If you only have one container and want to use different colours, prepare one dish of skeins at a time, cook it, cool it, rinse it, and then re-use the container. If you want all your skeins to be similar, you may need a larger container. If you don't have one, write down the amount of colour you used and how you put the dye on. I sometimes draw a little picture to show where I put each colour. Don't worry if your skeins are not identical. This is part of the fun!

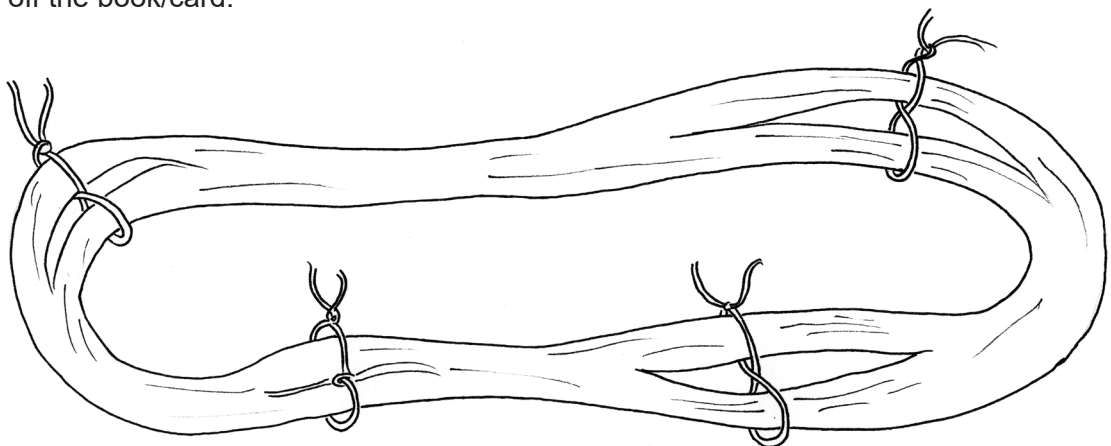
To make a skein use a large book or a piece of firm card. Wrap the yarn (evenly, but not too tightly) around your book/piece of card (Fig.1).

Fig. 1



Tie each skein in several places, tying the yarn in a figure of eight (Fig.2). Don't tie too tightly as otherwise the dye won't be able to get to the yarn underneath and you may get white patches. Slide the yarn carefully off the book/card.

Fig. 2



- ii) Next the yarn must be soaked in a fixing solution. This helps the yarn take up the dye more easily and ensures that the dye stays colourfast.

For animal (protein) fibres (wool, mohair, alpaca, silk etc.)

- Dissolve 25 g salt and either 100ml white vinegar, or 25g citric acid in 3 litres of warm water per 100g yarn or fibre

For plant (cellulose) fibres (cotton, linen, hemp etc.)

- Dissolve 25g salt and 25g sodium carbonate in 3 litres warm water per 100g yarn or fibre

iii) The yarn now needs to soak for 45 minutes, so while you are waiting you can be making up your dye solutions.

Apply the dye

There are lots of interesting ways to dye your yarn. Most techniques are based on the following two easy processes:

To make a single coloured skein

- Soak the yarn (see above)
- Dissolve the dye powder in warm water in a container large enough to allow the yarn “room to breathe”. The amount of water is not important as long as the yarn is completely covered. 5g (1 tsp) dye powder should be plenty to dye 100g yarn a single, deep colour. For a pastel shade, about 0.5g (¼ tsp) should be enough.
- Squeeze most of the water out of your pre-soaked skein, put it in the container and swirl gently, then fix the yarn as detailed below.

To make a multi-coloured skein

There are many exciting ways to create multi-coloured skeins. The simplest way is to dissolve your dye powders in a number of squeeze bottles, jars or plastic cups. The dye solutions can then be squeezed or poured onto the yarns.

- Soak the yarn (see above)
- Put 5g dye powder carefully into a bottle or cup. Add 500ml warm water and stir until fully dissolved. 5g of dye powder will make at least 500ml of dye solution at a good strength. For pastel colours use less powder or more water. For stronger colours more powder will be needed or less water.
- Squeeze most of the water out of the pre-soaked skein and lay it in your container. If there is not much yarn in your container lay a couple of pieces of kitchen paper under the skein to prevent the dye solution from spreading too quickly.
- Squirt or pour the dye slowly and carefully onto the yarn. Try not to apply too much dye as the colours may mix up too much and go “muddy”. The yarn will then need to be fixed as detailed below.

Fix the dye, rinse and dry

Setting Procion MX dyes is very simple.

For plant fibres, simply leave the dyed yarn for 6 hours or overnight in a safe, cool place. It can then be rinsed and dried and is ready for knitting!

For animal fibres, to make the dye permanent the yarn needs to be “cooked” once the dye has been applied. If you do not have access to a microwave, see the note below.

- Loosely place the lid on the dish and microwave on full power one minute at a time for 3-4 mins or until the liquid is near to boiling. For single colour skeins, gently stir the yarn after each minute. The time may need to be varied depending on the power of your microwave. Do not let the yarn dry out – add a little

more water if necessary.

- ii) Leave the cooked yarn to cool, rinse thoroughly in warm water then allow to dry naturally.
- iii) Once the yarn is dry, wind each skein into a ball (winding the skeins into balls makes them easier to work with when knitting/crocheting).

If you do not have a microwave you can dye the yarn in the oven in an ovenproof pyrex or similar dish, in a pan on the hob, or, for multi-coloured skeins, steam the yarn in clingfilm. Follow the instructions to dye, rinse and dry the yarn as for the microwave method but cook as follows:

For the oven, cook for 20-30mins at 275°F/140°C/gas mark 1. (For single-colour skeins, stir the yarn carefully every 10 minutes or so)

For the hob, cover and simmer gently for 20-30mins, stirring single-colour skeins carefully every 5 minutes

For multi-coloured skeins, enclose the yarn completely in clingfilm and steam for 20mins (5mins if using a microwave steamer)

(Note: For all cooking methods, ensure that the yarn is kept wet at all times. Yarn should not be allowed to boil but should be kept at simmering point. If necessary, add a small amount of water to the dye pot during cooking to prevent the pot boiling dry).

TOP TIPS

- A squirt of washing up liquid on top of the water in your soaking bucket helps the yarn soak up the water and fixer. If the yarn isn't sinking, place an old plate on the top to hold the yarn under the water.
- Try using varying proportions of colours and remember that shades of a single colour can be as effective as lots of different colours.
- The colour of your dyebath is not necessarily the colour your yarn will be – even if it looks murky and horrible, persevere to the rinsing and drying stage. If you still don't like it, consider overdyeing.
- When working with dye powders it can be hard to judge the amounts used so when creating new shades, always make each powder into a standard solution first. Then, mix the separate solutions in a third bottle, starting with the paler colour, and adding the darker one very gradually. For pastels, start with a very small amount of dye solution and add water gradually. Test shades by painting on a piece of kitchen paper.

© 2021 Debbie Tomkies
All rights reserved. Not to be copied or
distributed without written permission.

Health and safety guidelines

All dyes should be supplied with safety guidelines and these should be read carefully but in general, treat dyes much like any other chemical product in your house:

- Avoid inhaling dye powders – a dust mask is recommended when working with powders.
- Avoid inhaling vapours from dye pots and work in a well-ventilated area.
- Do not eat, drink or smoke while working with dyes.
- Dyes do stain so protect your skin, clothes and your dyeing area.
- Keep a separate set of utensils for dyeing only. Label (or keep clearly separated) all your dyeing equipment and don't use it for cooking or other activities. When using a stove or microwave clean thoroughly after each dyeing session.
- As with all chemicals, label dyes and store well out of reach of children and animals.
- Avoid dyeing if you are, or think you may be, pregnant.
- Please consider the environment when disposing of dyes. The quantities of dyes you will be using should have minimum impact and small amounts of diluted dye in your rinse water should not cause any problems. However, it is advisable, particularly if you plan to dye in significant quantities or have a septic tank, to take your unwanted dye solutions to your local waste disposal site where they may be dealt with according to the guidelines in your area.