

Using Hue & Dye Procion MX (fibre reactive) dyes

Please read our health and safety guidelines before using any of our dyes, mordants, fixers or auxiliaries.

What can I dye?

Procion MX dyes will work on any natural fibre 'goods' - yarn, fabric, fibre, fleece etc. They will work on both animal or plant fibres. Natural/synthetic blends will still dye but the higher proportion of synthetic content the less satisfactory the results.

You will need:

- Your dye powders. With our Hue & Dye dyes, one 10g pot of dye powder will dye 1kg of goods to a medium shade (less for deeper shades, more for pastel shades).
- Fixer (Citric acid/white vinegar for animal fibres, sodium carbonate for plant fibres)
- Dyeing containers (dish/pan/pyrex) and bucket for soaking/rinsing
- Gloves, dust mask, apron and plastic/newspaper to cover surfaces
- Measuring spoon and jug
- Several containers to hold the dye solutions: Squeezy "sports" bottles are ideal; alternatively, jam jars, well-rinsed plastic milk bottles or plastic cups
- Access to a microwave to set the dye (see note below if you do not have access to a microwave)

1) Prepare your goods (yarn, fabric, fibre, fleece etc.) for dyeing

- i) Prior to dyeing make sure your goods are scrupulously clean.
- ii) Soak your goods for at least an hour in the fixer solution as follows (remember they must be absolutely clean first and the fibres must be thoroughly wetted):
 - **Animal fibres (per 100g dry weight of goods):**
25g citric acid powder(or 100ml white vinegar) + 3 litres water
 - **Plant fibres (per 100g dry weight of goods):**
25g sodium carbonate + 3 litres water

2) Apply your dye

To dye in one colour ('immersion' dyeing):

- i) Soak the goods in the fixer solution as above.
- ii) Using the quantities below as a guide, make up your dye solution by adding the desired amount of dye to a beaker or bottle of lukewarm water. Stir until dissolved.
 - **For pastels, use 0.5g dye powder or less per 100g dry weight of goods**
 - **For a medium shade, use 1g dye powder per 100g dry weight of goods**
 - **For a dark shade, use 2g dye powder per 100g dry weight of goods**
 - **For black and deep reds, use 4g dye powder per 100g dry weight of goods**
- iii) Add the dye solution to a large dish of plain water and stir thoroughly. You will need enough liquid in the dish to allow the goods to circulate freely. For example, to dye 100g yarn to a medium colour you will need 1g dye plus around 3 litres water in your dyebath.
- iv) Squeeze most of the water out of the pre-soaked goods and place them in the dish. For this technique it is the amount of dye powder which is important, the amount of water should not make any difference.

To dye in multiple colours ('rainbow dyeing'):

- i) Soak the goods as above.
- ii) Make up your dye solutions by adding the desired amount of dye to a beaker or bottle of lukewarm water. Stir until dissolved. For this method the more water you add to the bottle the paler the colour will be. For a medium shade use 1 tsp dye powder (5g) to 500ml water. If you want a darker colour, use 2-4 tsp dye and about 500mls water. For a pale pastel use just 1/8 - 1/2 tsp dye and 500ml water.
- iii) Squeeze out most of the water and place the goods in a dish.
- iv) Squirt or pour the dye directly onto the goods. Try not to apply too much dye as the colours may mix up too much and go "muddy".

(3) Fix the dye, wash and dry

Protein (animal) fibres:

To make the dye permanent the goods need to be "cooked" once the dye has been applied. If you do not have access to a microwave, see the note below.

- i) Cover loosely and microwave on full power one minute at a time for 3-4 mins or until the liquid is near to boiling. This time may need to be varied depending on the power of your microwave. Do not allow to dry out – add a little more water if necessary.
- ii) Leave to cool, rinse thoroughly and dry.

If you do not have a microwave:

If you do not have a microwave, you can use an ovenproof pyrex or similar dish, steam in clingfilm or dye in a pan on the hob. 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 the hob, cover and simmer gently for 20-30mins
- Steam for 20mins (5mins if using a microwave steamer)

Leave in the container to cool then rinse in lukewarm water.

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.

Cellulose (plant) fibres:

Plant fibres do not need to be cooked, so fix as follows:

- i) Leave dye to set for at least 6 hours (ideally overnight).
- ii) Rinse once in ice cold water, then follow with a rinse in very hot water with a glug of washing liquid. Rinse in lukewarm until the water runs clear and allow to dry.