

# Learn to dye

microwave dyeing yarn



ashford  
WHEELS & LOOMS

spinning | weaving | carding | felting | knitting | dyeing

# Exploring colour with wool dyes

Dyeing your own fibre is fun and easy to do. Ashford wool dyes allow you to create every colour of the rainbow time after time using simple techniques.

## Exhaust Dyeing

Exhaust dyeing means the dye reacts with the fibre, water and additives until it is fully absorbed by the fibre.

To test whether your dye liquor has exhausted use a teaspoon to press into the fibre: when the liquid on the teaspoon appears clear then the dye has exhausted. Ashford wool dyes are acid exhaust dyes and require heat to set the dye into the fibre. Ashford dyes are for use only on protein fibre such as wool and silk.

## Terms used in exhaust dyeing:

Mordant (White Vinegar) – Assists the dye to fix to the fibre.

Wetting Agent (Liquid detergent) – This coats the fibre causing the dye molecules to move evenly around the fibre, to prevent patchy or uneven dyeing.

## To make a 1% solution:

10gms of dye makes 1 litre

5gms of dye makes 500ml

2gms of dye makes 200ml

## The easiest dye solution is:

1 litre mix containing 10 gms of dye powder, 150 ml of white vinegar and 850 ml of water, making 1 litre in total. This solution is most commonly used in our instructions for rainbow dyeing and for teaching purposes.

## This easy formulation for using Ashford wool dyes:

Weight of Fibre	White Vinegar	Dye Powder
1 kilo	150 ml	10 gms
500 gms	75 ml	5 gms
100 gms	15 ml	1 gm

Remember: The stronger the dye powder, the more vinegar is used.

Note: Dye powders can surprisingly vary in weight/volume. We recommend weighing for the most accurate results.

# Dyeing with Ashford dyes

## Safety Guidelines

It is important to follow these guidelines as dyeing can be hazardous.

Safety first. Always...

- Wear rubber or plastic gloves, when mixing and dyeing.
- Wear a face-mask when handling any powders or if you are in an enclosed area with the dye fumes.
- Cover all surfaces.
- Use dye equipment for dyeing only .
- Label and date all dyes and solutions.
- Lock away if possible.
- Neutralize all dye baths at the completion of dyeing and before disposal. Use baking soda to neutralize the acid in the water.

## Handy Hints

- Avoid temperature shocks between soaking, dyeing or rinsing stages as this can damage or shrink the fibre. Handle fibres gently to prevent felting.
- Never put animal fibres into the tumble dryer, as this causes felting.
- The amount of dye used is always in ratio to the dry weight of fibre to be dyed. If the weight of fibre increases, the weight of dye increases proportionally to achieve the same dye shade. Always weigh the fibre first. If you have too much dye to the weight of the fibre, it will not exhaust.
- Always mix dye with hot water, as this dissolves the fine granules/powder.

## Materials and equipment required

- Dyepot – needs to be large enough to hold fibre and sufficient water for dyeing. A lid is required to reduce condensation and exclude light. Stainless steel is ideal, because it does not react with the dye. Copper, brass and iron react with metal salts and “saddens” the dye.
- Stainless steel or plastic spoons to be used when stirring dye or mordant (wooden spoons or dowel stain and can transfer dye when wet).
- Rubber gloves protect hands from dyes.
- Face-masks are required for handling dry dye powder and avoiding breathing fumes.
- Cream cleanser neutralizes the dye and is excellent for removing stains from surfaces.
- Baking soda should always be used when discarding dye liquor down household systems as this neutralizes the solutions.
- Levellers or wetting agents are added to the dye bath to prevent patchy or uneven dyeing. Use a neutral liquid detergent as a leveller. To each litre of water add 1 ml of liquid detergent.

# MICROWAVE DYEING A SKEIN OF YARN

THIS TECHNIQUE IS IDEAL FOR SAMPLING  
COLOURS AND DYEING SILK.

## You will need:

- 100gms of spun yarn (skein)
- 10gms Ashford wool dye - blue, scarlet, yellow
- Dishwashing liquid
- White vinegar
- Plastic cling film (Glad wrap)
- Measuring spoons
- Paint brush
- Rubber gloves
- Bucket
- Stirrers
- Microwave (used only for dyeing)
- Face-mask
- Jar -250ml



01

Wind your yarn into a hank.



02

Prepare a bucket of warm water with  $\frac{1}{2}$  teaspoon of dishwashing detergent. Add skein of yarn and soak for 30 minutes.



03

Mix  $\frac{1}{8}$  teaspoon of dye powder with sufficient hot water to dissolve. Add 2 tablespoons of white vinegar and then fill jar with warm water.



04

Squeeze out excess water and place plastic cling film onto a flat surface. Ensure you have enough wrap to cover the skein. Lay skein onto the wrap.



05

Using your brush, paint the dye liquor onto the skein. Ensure that the skein is well covered with the dye solution. You may need to turn the skein over.



06

Wrap skein into a parcel by folding in sides and then ends, so that the sides of the skein are not touching.

07



Wrapped skein into a parcel ready for microwaving.

08



Microwave on high for 1 – 2 mins. Do not burn the yarn, so check after 1 min.  
Hint: Place a cup full of water in centre.

09



Allow the yarn to cool a little and then remove from the wrap. Rinse in warm water, then in cooler water. Spread the skein out on a towel or sheet and leave to dry in the shade.

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