

Learn to dye

rainbow one pot yarn



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:

In one 250ml jar (an old jam jar is good) use $\frac{1}{4}$ cup of white vinegar to 1 teaspoon of dye powder. Then fill with water.

This solution is most commonly used in our instructions for rainbow dyeing and for teaching purposes.

This easy formulation is using Ashford wool dyes:

Weight of Fibre

1 kilo

200gms

100gms

10gms

1gm

White Vinegar

10 tablespoons

2 tablespoons

1 tablespoon

$\frac{1}{2}$ teaspoon

$\frac{1}{4}$ teaspoon

Dye Powder

10gms/5 level teaspoons

2gms/1 level teaspoon

1gm/ $\frac{1}{2}$ level teaspoon

2 - 4 dessertspoons of 1% solution

2 - 4 teaspoons of 1% solution

Remember that the stronger the dye powder, the more vinegar to be used

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.

RAINBOW ONE POT DYEING YARN

You will need:

Ashford wool dyes -scarlet, blue, yellow
Dishwashing liquid
50gms of spun yarn (skein)
Rubber gloves
White vinegar
Plastic cling film (Glad wrap)
Measuring spoons
Paint brush
Bucket
Stirrers
Face-mask
Jars -250ml
Heating element

01



Wind your yarn into a hank.

02



Prepare a bucket of warm water, add the yarn and soak for 30 minutes with a ½ teaspoon of dishwashing detergent.



03

Mix 1 teaspoon of dye powder with hot water to a paste in the jar and then add sufficient warm water to dissolve.



04

Add $\frac{1}{4}$ cup of white vinegar and then fill jar with warm water.



05

Squeeze out excess water from yarn and place in dye pot.



06

Pour on the first colour.



Pour on additional colours, keeping the colours slightly separated.



Press down yarn to soak up the dye, ensure all yarn is dyed.



With lid on slowly bring to the boil. turn heat down and simmer.



Simmer until dye has exhausted (all the colour has been absorbed and the water is clear). Allow the dyebath to cool before handling.



11

Remove the yarn from the dyepot. Let the yarn cool then rinse in warm water then rinse with cooler water. Do not shock the yarn with a sudden change in temperature. Spread yarn out on a towel or sheet and leave to dry in the shade.



12

When dry, ball or re-skein.



The colour wheel has three primary colours - **yellow**, **scarlet** and **blue** - from which all other colours are mixed.

Secondary Colours:

Yellow + Blue = **Green**
 Blue + Red = **Violet**
 Red + Yellow = **Orange**

Tertiary Colours:

Blue + Violet = **Blue-Violet**
 Blue + Green = **Blue-Green**
 Yellow + Green = **Yellow-Green**
 Yellow + Orange = **Yellow-Orange**
 Red + Orange = **Red-Orange**
 Red + Violet = **Red Violet**

The samples have been made using the 3 primary colours - **yellow**, **scarlet** and **blue**.

Green = 1/4 tsp yellow
 1/4 tsp blue

Blueberry = 1/4 tsp blue
 1/8 tsp scarlet

Peach = 1/4 tsp scarlet
 1/8 tsp green
 drop of blue

Violet = 1/4 tsp scarlet
 1/4 tsp blue

Orange = 1/4 tsp yellow
 1/4 tsp scarlet

Books available from Ashford



The Ashford Book of Weaving for the Four Shaft Loom
By Anne Field



The Ashford Book of Rigid Heddle Weaving
By Rowena Hart



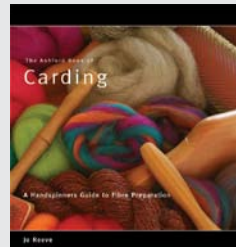
The Ashford Book of Weaving for Knitters
By Rowena Hart



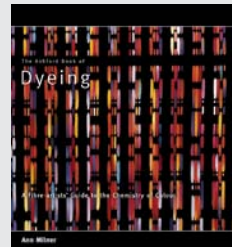
The Ashford Book of Projects



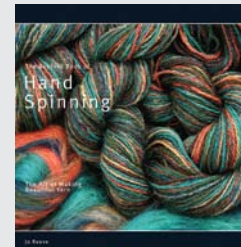
The Ashford Book of Projects for the Eight Shaft Loom
By Elsa Krogh



The Ashford Book of Carding
By Jo Reeve



The Ashford Book of Dyeing
By Ann Milner



The Ashford Book of Hand Spinning
By Jo Reeve



Weaving on the Ashford Knitters Loom DVD



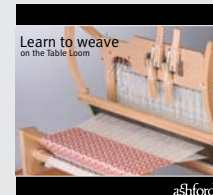
Learn to Spin Booklet



Learn to Weave on the Rigid Heddle Booklet



Learn to Weave on the Knitters Loom Booklet



Learn to Weave on the Table Loom

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