

Acid Dyeing

Acid dyes work on protein fibres, ie from animals, such as wool, silk, alpaca, angora, plus nylon. They don't work on plant fibres -cotton, linen, viscose etc.

They come with acid already in them (all-in-one) or without (milling). If without then you will need to add either vinegar or citric acid to fix the dyes.

Dyes can be used as they are or the colours can be mixed.

There are many makes - I use Kemtex and Colourcraft. They sell starter kits or pots ranging from 10g to 500g. There are other makes such as Dharma and Landscape none of which I have used.

Concentration of dye stuff. For each 100g of dry yarn/fibre use a total of
5g of dye for strong colours
1.5-2g of dye for medium colours
0.5g of dye for pale colours

NB these are total dye weights so if dyeing with four colours you do NOT use 5g of each!

If you want to do repeatable colours then make up the dyepowder with water (eg 5g in 100ml) and use a syringe to measure out. And keep copious records. Dyes diluted in water (with no acid) can be stored indefinitely, but will need acid adding when you use them (e.g. rinse the skein in vinegar water).

You don't have to use white yarn/fibre, but do bear in mind any other colour will affect the dyes. Eg grey usually gives lovely jewel colours.

Books – “Yarns to Dye For” by Kathleen Taylor, and “Color in Spinning” by Deb Menz

Suppliers – Kemtex, Colourcraft, DT Craft (who also sells equipment and undyed yarn). Yarnundyed sell white yarn, and John Arbon and World of Wool sell white wool fibre.

Internet – Ravelry has groups on these subjects like “Love to Dye” and “UKSpinners”

Equipment

- Acid dyes
- White vinegar or citric acid
- Pots such as yoghurt, soup, sauces ones about 700g size (can use smaller pots if using a syringe rather than dunk dyeing)
- Teaspoon/dessert spoon
- Measuring jug
- Cling film
- Vinyl gloves

For making a 4-stripe sock yarn weighing 100g

Wind yarn into a long skein. My skeins are about 6.4m and I put figure of eight ties every 50cm. This gives 2-row stripes on 64stitches using 2mm needles. The width of the strips will change using more or fewer stitches, or if you are a loose or tight knitter.

Wet thoroughly in water. (put detergent in if you are unsure how clean it is)

Make up four colours in separate pots. For each colour use ¼ tsp of dye with a tablespoon of white vinegar. There is no point using too much dye as it won't take up, though you could add more acid and dye the next skein paler.

Dip a quarter of the well-squeezed skein down in each pot, moving the wool to ensure there are no white gaps left between the colours.

Leave for ten minutes or so.

Wrap each colour in its own batch of clingfilm, and then the whole lot in another batch of clingfilm.

Steam for 30 minutes. Leave to cool thoroughly (overnight even).

Rinse and dry. If properly set there shouldn't be any colour running on the first rinse.

Variations

Work out how long you want the stripes to be by knitting with some of the yarn before dyeing and measuring how much yarn is used for each row/round, and then calculate your skein length on multiples of this. (see Yarns to Dye for book)

Instead of putting the yarn in 4 pots, spread the very well squeezed out skein on cling film and paint it (can use sponge paintbrushes or big syringes). NB stick to the rule that the total amount of water should be the same number of ml as the skein weighs in grams (ie 100ml for 100g of wool).

Fibre can be dyed too. White bits in fibre are good and act as lighteners. They will almost certainly disappear when you spin. Dye three similar shades to make a semi-solid coloured yarn once spun, or dye stripes bearing in mind the fibre staple (ie the stripes should be longer than the staple if you want them to be distinct). (see Color in Spinning book)

Kettle dyeing - cover fibre/yarn with water in your cooking pot. Sprinkle dye over it. Bring to boil and boil until water is clear. Do not stir. Leave to cool.

NB some people microwave or oven bake their wool. I don't so can't offer any instructions on how to. The internet or a book will no doubt tell you.