



indigo recipe



PRE- REDUCED 60% INDIGO

INDIGO belongs to the 'vat' family of dyes and whether you use natural Indigo or synthetic, they are both insoluble. To dissolve Indigo, you first need to remove the oxygen from the dyebath and then dissolve the dye. After this has been done it will be able to bond with the fabric. Indigo will only dye natural fibres and Natural Indigo tends to be weaker than Synthetic Indigo but otherwise, they both behave the same way in the dyebath. This recipe is for the HYDROSULPHITE vat. There are several different vat recipes but this is the most straightforward, quickest and easy method. We recommend sensible dyeing practices - you always work in a well ventilated space, wear gloves and avoid breathing fumes.

EQUIPMENT:

Rubber Gloves
Wooden Spoon
Stainless steel pot
Thermometer
Measuring Jug
Protective Clothing
Heat Source

MATERIALS

Soda Ash or Caustic Soda
Indigo Powder
Sodium Hydrosulphite
A sense of adventure
Any natural Fabric or fibre
(wash before dyeing)

The dye is dissolved with Soda Ash or Caustic Soda & then Sodium Hydrosulphite is used to remove the oxygen from the dyebath. This is known as 'vatting out' and when Indigo is vatted out in solution it changes from blue to yellow/green. The surface of the dyebath should be a bluish, bronzy colour with some bubbles on it which is known as 'the flower'. This is caused by the Indigo returning to its insoluble state where it comes into contact with oxygen. A healthy Indigo dyebath should be greenish/ yellow. Once the dye is dissolved, the fabric is submerged in the vat. When the dyeing is complete, the fabric is removed from the dyebath, exposed to the air (OXIDISED) and the dye returns to its original rich blue colour. An Indigo vat is in a constant state of fermentation and you will need to keep an eye on the health of your vat for successful dyeings.

This recipe is for 750 gm fabric can be adjusted for larger or smaller amounts by multiplying the amounts or dividing the ingredients proportionately.

25gms Pre reduced Indigo 60%
150gms Soda Ash
70 - 80gms HYDROS ST (Kraftcolour) 25% Sodium Hydrosulphite

INSTRUCTIONS:

1. Make up a dyebath with 6.5 litres of warm water
2. Dissolve the Soda Ash and Hydros in the dyebath.

Dissolve the Indigo in hot water and slowly add it to the Soda Ash solution. Make sure they are thoroughly mixed.

3. Stir the dyebath until the 'flower' appears on the surface then cover it and let it stand until the dye is completely **vatted out**. By covering the dyebath, you avoid too much oxidation. When the dyebath is ready to use, it should be a clear greenish yellow colour and have bronzy bubbles on the surface. If the dyebath is till blue and cloudy, the dye is not dissolved properly and you will need to add a little more Hydros.

DYEING THE FABRIC

Before dyeing the fabric, make sure the Indigo is completely '**vatted out**' by dipping a sample of the fabric into the vat. It should come out of the dyebath greenish yellow and then turn blue when exposed to the air. Try to keep the vat at 50c, lower the fabric into the dyebath and leave it there for 10mins. Remove from the dyebath, squeeze out excess dye and allow it to OXIDISE. To darken the shade redip the dyeing for a further 10 minutes or leave it longer. Check your dyebath to make sure it is still in solution and if you notice it's going greenish/blue, sprinkle a little more Hydros on the surface to keep it vatted out. Avoid the 'flower' bubbles, these will leave blotches on your fabric.

After you have oxidised your fabric and you're happy with the colour, wash well in hot soapy water to remove excess dye and chemicals.

The dyebath will keep for several weeks and you can keep using it until all the dye is exhausted. If it starts to go cloudy and more blue than green, sprinkle $\frac{1}{2}$ a teaspoon of Hydros on the surface, stir it in. Allow it to sit once again until it vats out.

