

Kraftkolour Pty Ltd Unit 2/99 Heyington Ave THOMASTOWN Vic 3074 +61 3 9465 4865 www.kraftkolour.net.au

INDIGO DYEING FAQs

Which Indigo Dye should I buy?

Natural Bio Indigo, Synthetic Indigo or Pre-reduced Indigo 60%?

Natural Bio Indigo is extracted from the Indigo plant whereas **Synthetic Indigo** is synthetically produced to resemble to same chemical composition. In this way, Synthetic Indigo works the same way as the Natural Indigo but is cheaper to produce and slightly stronger. **Pre-reduced Indigo 60%** is synthetic indigo that has been pre-mixed with an alkaline dyeing auxiliary. The Pre-reduced Indigo is weaker at 60% the strength and generally requires multiple dippings to build up depth of shade. However, Pre-reduced Indigo 60% requires half the amount of Soda Ash in the dyebath as the other 2 types as it already has alkaline properties.

Which Indigo Vat recipe should I use?

Hydros Vat or Fermentation Vat?

Sodium Hydrosulphite (Hydros) is used with an alkaline such as Soda Ash to 'vat out' an Indigo dyebath. Hydros removes the oxygen from the water which enables the indigo, usually insoluble in water, to become soluble and affix to the fibre or fabric in the vat. The 'vatting out' with Hydros is near 'instant' once added to an alkaline Indigo Vat.

A **Fermentation Vat** does not use Hydros or Soda Ash, but instead relies on the fermentation of Fructose in combination with an alkaline such as Lime (Calcium Hydroxide). In order to ferment, the sugar slowly pulls the oxygen out of the water similar to how Hydros robs the water of oxygen. 'Vatting out' using the fermentation method takes more time than the Hydros Vat and produces far paler dyeings, often requiring multiple dippings to build up depth of shade.

Is Indigo dyeing safe?

Like many dyeing processes, Indigo dyeing most often requires the use of various chemical auxiliaries. As with all our dye products, we recommend wearing appropriate safety wear (gloves, masks and safety glasses) as well as ensuring the workspace you are using is properly ventilated.

- All indigo vats require an alkaline component in order to assist in 'vatting out' (removing the
 oxygen from the water) however different alkaline auxiliaries differ in their level of eye, skin
 and respiratory irritation. Soda Ash and Lime can both be irritants. However, this can be
 mitigated by proper safety wear (gloves, glasses, mask) and dyeing conditions (ventilation).
- When Hydros comes into contact with water, it produces heat. While it is not a significant amount of heat, Hydros that has become wet should not be stored in a sealed container.
- The Indigo dyes themselves are not highly irritable but they are what we call very 'dirty' dye.
 Meaning, they are difficult to remove from skin and clothing. Synthetic and Natural indigo
 dye powders in particular are both very 'light' and should be carefully handled to avoid
 excessive mess.