

## Technical Data Sheet

### **Solvent Based Hydrochromic Inks**

#### **Technical Product Information**

**Metachromatic Function:** Irreversible

**Product Name:** Solvent Based Hydrochromic Flexo

**Last Revision:** 31/08/2018

#### **Description**

A hydrochromic ink changing from colour to clear is available in a solvent based flexo ink formulation.

A general purpose ink for absorbent substrates such as paper, and board. Various colours possible the standard is blue or black

Supplied as a 1 part ink system ready formulated and easy to use allowing flexibility in application and optimisation in appearance of printed article.

#### **Application**

Print onto paper or card. The ink dries it giving opaque colour. It may be recoated to increase opacity. When wet the ink loses its colour and goes clear.

Decolouration of the ink on wetting may be affected to some extent by different substrates or if the water evaporates on the surface. The difference between a fresh print area and one that has been exposed to moisture will always be quite apparent. Users should evaluate the effectiveness of the ink on their own substrate. Prints on an absorbent substrate will show far less tendency to regain colour after they have dried out after being exposed to water. A print on a non-absorbent substrate where the moisture dries out still on top of the print may show colour reversion. Exposure to high humidity, >80% RH, may cause colour to fade. The substrate will have a direct bearing on the extent of fading with high humidity – absorbent materials such as paper encourage fading but the same ink printed on plastic will retain the colour much better. Different colours may have a different level of sensitivity to humidity – magenta is sensitive to 80% RH, even on plastic.

#### **Product Properties**

##### **Adhesion**

The adhesion of Solvent Based Hydrochromic Ink depends upon the surface properties of the selected substrate. Due to the wide variety of substrates it is recommended that this ink is evaluated fully prior to any commercial use.

##### **Rub Resistance**

The ink itself after baking exhibits good rub resistance properties on absorbent and non absorbent substrates. It will print on paper and print receptive plastics.

