

## **Water Based Wash and Win Ink**

### **Technical Product Information**

**Metachromatic Function:** Irreversible

**Product Name:** Water Based Wet & Reveal Screen Ink

**Last Revision:** 21/04/2015

#### **Description**

A water based ink for paper, plastic, film and board substrates. Various colours possible.

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**

Screen onto paper, print receptive plastic film and labels. As the ink dries it giving opaque colour. It may be recoated to increase opacity. When wet the ink washes off the surface. This ink is formulated to be permanently water sensitive.

Caution – the ink works by washing off the substrate when wet so consequently all the colour and ink components will be released into the water. Articles in the water may be stained by the colouring matter. Always ensure the ink is suitable for the proposed application – this is the user's responsibility. Some substrates may also be stained by the colouring in the ink reducing the effect when washed off. If this is likely to be a problem the surface should be first sealed by printing with our Wash and Win Tycote.

#### **Product Properties**

##### **Adhesion**

The adhesion of Water Based Wet & Reveal Screen 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. A clear tycote may be used to improve adhesion on difficult substrates. The tycote will also help full colour loss on wetting as some substrates can absorb the ink colouring and have a slight stain after wetting.

##### **Rub Resistance**

The ink itself after baking exhibits good rub resistance properties on absorbent and non absorbent substrates. It well to paper and print receptive plastics. Adhesion to difficult plastics may be improved by first printing our compatible water based wash and win tycote ink.

## Additional Product Properties

<b>Pigment Content (%)</b>	<b>8-15% depending on colour</b>
<b>Solid Content (%) <sup>1</sup></b>	<b>18 – 27% depending on colour</b>
<b>Solvent</b>	<b>Water</b>
<b>pH</b>	<b>&gt;8.0</b>

## Recommended Printing Parameters

The optimum screen configuration depends on several factors, the most important of which is the desired opacity.

The theoretical ink volume of the screen is crucial for the desired effect. Using a higher theoretical ink volume will increase the opacity.

	<b>European / US Measurement</b>
<b>Recommended Mesh Size</b>	<b>77T / 196</b>
<b>Minimum Mesh Size</b>	<b>90T / 229</b>

Do not allow the ink to sit dormant on the screen as this will cause 'drying in' on the screen and affect print definition and quality. Dried in ink does not easily re-wet and screens are easily cleaned with water.

## Ink Consumption

Typical ink consumption for Wash and Win Water Based Screen Ink on a 70T /196 mesh is approx 30 – 35gms per sqm. In some applications where high opacity is required 2 or 3 passes may be required.

## Drying

The ink will air dry or can be forced dried with IR lamps or hot air. It is recommended that the ink and substrate are fully tested in the printing procedure before a print run.

## Cleaning recommendations

Do not allow inks to dry in on the mesh. Clean thoroughly with water.

## Handling

Water Based Wash and Win Ink is a one part ink system that will remain stable if kept in the supplied container and stored in the correct storage conditions.

## Mixing Instructions

Contents may settle on transit. Ink should be thoroughly mixed using a mechanical stirrer prior to application. Do not mix with other ink systems