

# Hydrochromic Paint

234-800A

**Uncover secret imagery or use as an early warning when something should not be allowed to get wet.**

## How it works

A hydrochromic pigment is one that changes colour or produces a colour change when exposed to water. It can be reversible or non-reversible. The version supplied by Mindsets is the most common type of reversible hydrochromic pigment and works by forming an opaque film that covers a coloured image or pattern. When the film is exposed to water, it becomes transparent and reveals whatever is hidden underneath - thus appearing to change colour. As the film dries, it returns to its opaque state and covers up the image or pattern. (Nb. The process of 'transparentising' is similar in principle and has been used in graphics for a number of years; many fluids such as liquid paraffin, or liquid metal polish will cause paper to become semi-transparent.)

Hydrochromic pigments are used widely on umbrellas whose fabric is brightly printed and then coated. When they get wet, these umbrellas appear to undergo a rapid visual change that reverses on drying out.

## Using the pigment

In terms of working properties, the pigment resembles an acrylic media and can be hand painted, block printed, screen printed or even stencilled onto a surface. After application, the pigment is left to dry (ideally at least 3 hours) and will then behave as described. The underlying colour, image or pattern can be created in a variety of ways ranging from hand painting to the application of found printed images. However, if printed paper is used as the substrate, it must first be waterproofed (e.g., lacquered or varnished) before applying the hydrochromic pigment.



## Potential applications

1. Adding visual interest – existing umbrellas and waterproof garments can be given small areas of visual interest by painting on a colour, pattern or image and then overlaying this with the pigment.
2. Enhancing function - e.g., it can be difficult to gauge the height of clear water in a container; a coloured plastic strip coated with the hydrochromic pigment can give a much clearer indication of water level.
3. Toys and amusements – e.g., invisible messages on cards, plastic badges worn on garments



Supplied by:

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