



Why is an under-base required under some colours

Under-base: Essential or unnecessary?

Does your logo consist of 2 colours, but is being printed on dark coloured garments? If so, this 2 colour print is probably going to turn out to be a 3 colour print.

Why the extra colour?

The extra colour is actually something that you do not see on the surface of your printed garments, but it is something that goes under your design, and is referred to as an under-base. Printing with an under-base is a necessary technique that we use when printing certain garment colours, to ensure that print colours are not compromised, and that a sharp crisp print is achieved with PMS colours represented accurately.

The opacity of plastisol inks means that the garment colour influences the appearance of the ink. For example, yellow ink printed directly onto a black t-shirt is darkened by the fabric colour that shows through the ink. This leads to a muted, and somewhat drab design.

To get around this, we apply an under-base in white plastisol. This layer of white is flash cured on the printing machine, so that its cured (dry) enough to print on - the other colours in the design are then printed over this under-base.

To make it easier to visualise, think of painting on a dark coloured wall. Lets say you want to paint a dark grey wall with a light yellow. You know if you paint the light yellow directly over the dark grey wall, the light yellow wont appear the way you expected it to. You would need to paint a white undercoat first, and then paint the yellow over the top of the white. In this way, the colour painted over the undercoat will maintain its integrity & vibrancy.



The example above, demonstrates the different result when using the same Yellow PMS colour, with & without an underbase. The visual on the left, clearly shows the black garment showing through the yellow ink & altering the shade & depth of yellow, giving it a “greenish” under tone.