SERICOL
More than ink…Solutions.

# *FAQ:*
## *My UV ink is not as opaque as my solvent-based ink. What can I do?*

***Answer:***

This is true! The nature of UV inks means that they cannot be as opaque as many solvent-based inks, due to lower pigment loading. Solvent inks dry by solvent evaporation. When the solvent (approximately 50% of a solvent ink) evaporates from the printed ink film, we are left with a dry ink film consisting of perhaps half resin and half pigment. The proportions will vary depending upon the particular ink formulation, but many solvent inks contain approximately 10% to 40% pigment.

UV inks cure by light. UV energy must pass all the way through the ink film to hit the substrate and bounce back out. Opaque, of course, means that light will not pass through, so that if UV ink films were actually opaque, it would be physically impossible to cure them properly. Most UV curable inks contain approximately 5 to 10% pigment, though many of the “Super Opaque White” UV inks may have as much as 30% pigment or even more in some cases. Even “Super Opaque” UV inks are not as opaque as solvent based inks. They are simply more opaque than UV inks with “normal” levels of pigment loading.

The lower opacity of UV ink is not normally a problem on most substrates, but can be an issue when printing transparent decals. It is sometimes necessary to print a white under the colours to help block out the light. Some printers prefer to print twice for colours such as black. Under certain circumstances, it is possible to increase the pigment loading of the ink, but modern high UV output reactors (UV dryers) are necessary for curing these special inks. Different solutions are possible depending upon the particulars of the job.

Please contact Sericol’s Technical Services Hotline at 1300-135-357 to discuss any particular situations with UV inks.