Gans Fluorescent Inks

Fluorescent Inks ready mixed and matched to the PANTONE formula guides. Basic colors:

PANTONE® 801-Fluorescent Blue
PANTONE® 802-Fluorescent Green
PANTONE® 803-Fluorescent Yellow
PANTONE® 804-Fluorescent Orange

PANTONE® 805-Fluorescent Red-Orange
PANTONE® 806-Fluorescent Pink
PANTONE® 807-Fluorescent Magenta

Other color blends are available.

What Is Color?

Color is the visual effect that is produced when any portion or portions of the visual spectrum are incident upon the human eye. When we project the visual spectrum onto a black surface we experience almost total absorption and on white there is total reflection. The same phenomenon occurs when we project the visual spectrum onto a conventional red-orange surface: very high levels of reflection appear in the red-orange areas of the spectrum (like the white) while almost total absorption happens in the yellow- green areas (like the black).

The main point here is that a red-orange surface has the ability to reflect only red-orange waves of light, absorbing all others.

What Is Fluorescence?

Fluorescence occurs when a surface is capable of converting relatively short wavelengths of this electromagnetic energy into longer wavelengths of visible light. Because these shorter wavelengths are converted to red-orange and are reflected in addition to the red-orange portion of the spectrum, the human eye receives a sensation of extreme brilliance. This ability to convert other wavelengths of light is the one property of daylight fluorescent materials that make them three to four times brighter than their conventional counterparts.

Black Is The Difference

Fluorescence is a conventional color minus black. To see this for yourself, take a piece of acetate containing a 20% black screen and place it over a fluorescent color. You'll see that the fluorescent effect will disappear leaving only a conventional color. The same thing happens when we add black to a fluorescent color. When we remove the black, the original brightness reappears. Because fluorescent inks are semi-transparent, they can easily lose their brightness from introducing as little as 0.1 % of black ink, the same effect created by the 20% black screen in the experiment.

Fluorescents Run Heavier

With conventional inks the film thicknesses required to achieve the desired color are as follows: Lithography - 1/16 mil; Letterpress - 1/8 mil; Gravure - 1/4 mil; Screen Process - 3/4 mil. Compare these figures to Fluorescent inks which need 1/4 mil. film thickness in order to achieve the brightness of the color swatch. This means that we have to deposit double the amount of ink for letterpress and four times the amount of ink for lithography

With this in mind, it is easy to see why Gans Fluorescent inks are formulated for extra color strength. To achieve the optimum fluorescent shade with maximum brilliance, you may opt to double bump the ink.

Tips For Printing With Fluorescents

❖ Make sure all rollers and fountains are EXTRA CLEAN! The press should be as clean as if you were going to run yellow.

❖ Plates - Deep etched, medium grained plates are recommended for carrying the necessary thick ink film .

❖ Use the ink right out of the can.

❖ Set notches and keys to lay down the heaviest ink deposit possible. Gans Fluorescent inks will carry extremely well and are formulated to set fast. Even when an excessive amount of ink is carried, it will not offset on most stocks if sufficient non-offset spray powder is used.

❖ A variety of PANTONE shades and special color matches are available from Gans.

❖ Note: When using aqueous coatings, UV coatings, or laminating over inks, there is the potential for those inks to bleed and change appearance over time. Because fluorescent colors may be susceptible to bleeding, Gans Ink recommends pretesting all such projects.

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