



Professional Products=Top Performance=Winning Results

US Sublimation a division of
PrintVillage, Inc.

1881 West State Rd. 84 , Building 107
Fort Lauderdale, Florida 33315, USA
Tel..+ 954 727 2807 Fax + 954 727 2812

SUBLIMATION DYE INKS FOR HEAT TRANSFER USING INK JET PRINTING WITH PIEZO DROP ON DEMAND TECHNOLOGY

FLOBRITE fluorescent dyes for printing on polyester

Fluorescent inks for printing on polyester			
Product	Color Code	Retail Pricing*	
Very attractive volume pricing and bundle packages available, call for personalized quote.			
		*As of 05/01/2006 Subject to change without notice.	
FLOBRITE YELLOW	FB-Y	500gr (500ml)	\$129.00
FLOBRITE RED	FB-R	1Kg (1000ml)	\$239.00
FLOBRITE BLUE	FB-B	5Kg (5000ml)	\$1195.00

INK COMPATIBILITY

US Sublimation's LFP Dye Sublimation Inks are sold under license to European Patent EP 1 778 798. The license is transferred to the user at the time of purchase allowing the user to use the ink for dye sublimation. The use of this inkjet ink, under the terms of the license, is restricted solely to the use with ink jet printers having a carriage width of 42 inches or more.

PRINTERS: The FLOBRITE (FB) ink series is suitable for most wide format piezo printers using water-based inks (Epson, Mimaki, Mutoh, Roland).

TRANSFER PAPER: FLOBRITE inks have been tested to optimal performance with JetTran transfer paper.

INK DELIVERY: The FLOBRITE ink series has been tested to optimal performance on a variety of printers using the E-Z FILL and E-Z FLUX bulk ink delivery solutions from InkVillage.

INK JET PRINTING

The life span of piezo heads is considerably long and should conform to the manufacturer's specification even if inks based on disperse dyes are used.

Our inks based on disperse dyes have been tested on the most frequently used printers, but the suitability of the inks for individual machines and models has to be checked by the user. We are at our customers' disposal for further information.

If the inks dry in the nozzles, the normal cleaning procedure built into the printer should be applied.

The inks can be printed either directly on to the textile or indirectly via an intermediate substrate.

When the direct printing method is used, the dyes must be fixed by steam or by drying at 210°C (410°F) for 40 seconds. In order to reach optimum fastnesses the material must be washed after the fixation process.

With the indirect method, it has to be taken into account that the light fastness and rubbing fastness of the printed paper or other intermediate substrate are not very good. The printed substrate should therefore be handled with care and transferred as soon as possible after printing. To obtain a good color transfer and fixing, the printed substrate has to be transferred at 210°C (410°F) for 40 seconds.

FASTNESSES

See table attached. The fastnesses have been evaluated on a 105 g/m² 100% PES material. Transfer conditions were 210°C (410°F) for 40 seconds.

To achieve the fastnesses shown on the table, it is recommended with direct printing that the excess chemicals be eliminated by washing.

Product	Light	Light	Water (severe)	Washing (60°C)	Persp. (acid)	Persp. (alkali)	Rubbing (dry)	Rubbing (wet)	Dry clean.
	AATCC TM 16A gray scale/ hours	ISO 105 /B02 max. / 1:9	ISO 105 /E01 ch./st.	ISO 105 /C03 ch./st.	ISO 105 /E04 ch./st.	ISO 105 /E04 ch./st.	ISO 105 /X12	ISO 105 /X12	ISO 105 /D01 ch./st.
Fluo Yellow 776	4-5 / 100	4	4-5/4	4-5/4-5	4/4-5	4-5/5	4-5	4-5	5
Fluo Red 775	5 / 100	5	4-5/4-5	4-5/4-5	4-5/4-5	4-5/4-5	4-5	4-5	5
IWS7 Blue 824A	4-5 / 450	7/7	5/5	5/5	5/5	5/5	4	4-5	4-5/5

* The light fastnesses of IWS7 Blue 824A have been measured at 100% and 10% coverage, at 720 dpi. All other fastnesses have been measured at 100% coverage and 720 dpi.

Color fastness is a measure of how permanent a color is on fabric. Color can be adversely affected by a number of factors including exposure to light, to water and to normal wear and tear. Various tests assess how the color is affected by these different parameters and a numerical value is then established to indicate the degree of color change.

Color fastness to "Light"

In this test, a prepared specimen of fabric is half covered and exposed to artificial ultraviolet light along with a scale of light sensitive blue dyed wool standards designed to fade after different time periods. Only the uncovered part of the test sample will be subject to any fading.

The light fastness is evaluated on a scale of 1 – 8 using the blue dyed wool standards, where 1 indicates very low light fastness (maximum color change) and 8 indicates very high light fastness (minimum color change). Upholstery fabrics should display a minimum rating of 5 regardless of end usage.

Color fastness to "Rubbing"

This test is undertaken on a crock meter, whereby the fabric specimen is subjected to rubbing with a sample of standard undyed cotton fabric in order to check for color transfer. Two tests are involved, one using the rubbing cloth dry, the other with the cloth wetted. The rubbing cloth is placed on the finger of the crock meter which is then moved back and forth across the fabric sample ten times at a steady speed. The rubbing cloth is then evaluated using standard Grey Scales for staining, on which 1 signifies maximum staining and 5 no staining. For all grades of end use, fabrics must show a maximum staining of 3-4 for dry rubbing and 3 for wet rubbing.

Color fastness to "Water"

This test, carried out using a perspirometer, is used to determine if any color transfer occurs when wet fabrics come into contact with water. The fabric sample is fully immersed in deionised water together with strip of multi-fiber fabric (as its name suggests, this is a strip containing materials of different compositions). Each item is then placed in the perspirometer and left for four hours in a pre-heated oven at 37°C. The multifiber strip is then assessed for color staining using the standard Grey Scales

COLOR MANAGEMENT

Special care should be taken when printing in the same design the FLOBRITE inks together with the standard LFP inks, so that overprinting FLOBRITE and standard LFP inks be avoided.

If you have enough free positions in the printer for all three FLOBRITE fluorescent inks, you may print the individual colors alone or, for orange shades, overprint FLOBRITE Yellow and FLOBRITE Red and for green colors overprint FLOBRITE Yellow and FLOBRITE Blue.

If you have only two positions free in the printer we suggest you install only FLOBRITE Yellow and FLOBRITE Red. You may print the individual colors alone or, for orange shades, overprint FLOBRITE Yellow and FLOBRITE Red and for green colors overprint FLOBRITE Yellow and LFP Blue. In this case the green shades will be somewhat less vivid than when using FLOBRITE Blue and will have a lower stability of shade with fluctuation in the transfer temperature.

SHELF LIFE

Shelf life of LFP ink is 6 months.

STORAGE & HANDELING

Store in dark temperature controlled room. Do not allow to freeze and don't expose to extreme temperature fluctuations. Don't expose to direct sunlight.

It is advised to rotate bottles every month and to gently shake contents before pouring in ink delivery device.

To the best of our knowledge the information contained herein is true and accurate but all recommendations or suggestions are made without guarantee.