



## STARFIRE® II INK

DayGlo® StarFire II Inks are formulated from DayGlo StarFire II Base colors. They are a unique combination of ultra-fine, high strength fluorescent pigment dispersed in a rheologically controlled vehicle system. This yields maximum color density and excellent printability. StarFire II Inks were developed to meet the needs of the printer and the color specifier. They are available from DayGlo Color Corp. in eleven standard fluorescent colors, seven Pantone® 800-series\*\* colors and seven Fresh Colors™ (double bump strength in a single bump).

### Available Colors:

#### STANDARD FLUORESCENT COLORS

SFI-211B	Aurora Pink* (Blue Shade)	SFI-217	Saturn Yellow*
SFI-211Y	Aurora Pink* (Yellow Shade)	SFI-218	Signal Green*
SFI-213	Rocket Red*	SFI-221	Corona Magenta*
SFI-214	Fire Orange*	SFI-222	Strong Corona Magenta*
SFI-215	Blaze Orange*	SFI-223	Strong Saturn Yellow*
SFI-216	Arc Yellow*		

#### PANTONE-800-SERIES COLORS

SFI-2801	PANTONE 801 Blue**	SFI-2805	PANTONE 805 Red**
SFI-2802	PANTONE 802 Green**	SFI-2806	PANTONE 806 Pink**
SFI-2803	PANTONE 803 Yellow**	SFI-2807	PANTONE 807 Magenta**
SFI-2804	PANTONE 804 Orange**		

#### FRESH COLORS

SFI-251	Fresh Color Blue*	SFI-255	Fresh Color Red*
SFI-252	Fresh Color Green*	SFI-256	Fresh Color Pink*
SFI-253	Fresh Color Yellow*	SFI-257	Fresh Color Magenta*
SFI-254	Fresh Color Orange*		

\*Trademark of DayGlo Color Corp.

\*\*Pantone, Inc.'s check-standard trademark for color reproduction and color reproduction materials.

## Features & Benefits:

- Stronger, brighter colors.
- Excellent tack stability.
- Advanced rheology for better press performance.
- Faster setting & drying.
- Non-chalking.
- Ultra low emulsification properties.
- Improved ink transfer characteristics.
- Reduced VOC level

## Typical Physical Properties:

Color:	78-82% StarFire II Base
Tack:	13-15 @ 1200 RPM, for 1 min. @ 90°F
Wax:	PTFE (Teflon)
Volatile Organic Compounds:	1.0-1.2 Lbs./Gal. (130-140 g/l)
Weight Per Gallon:	8.8-9.0 Lbs./Gal.
Ten Minute Tack Rise:	3.0 @ 1200 RPM, 90°F

## Color Stability & Shelf Life:

StarFire II Inks are color stable and will not darken. The minimum shelf life on this product is 24 months from the date of manufacture.

## Color Strength, Brightness & Finish:

StarFire® II Inks will dry to a uniform satin finish. This enhances the color brightness and brilliance. The StarFire II Inks have excellent transfer properties and produce strong, transparent colors.

## Low Odor:

StarFire II Inks are formulated with severely hydrotreated ink oils only. They have been formulated to produce low odor on the press, even when using infrared lamps to assist drying.

## Press Performance:

StarFire II Inks have superior press stability. Tests indicate an average tack rise of only 0.3 points per minute or less at 1200 RPM and 90°F. They are fully capable of being run on sheetfed, offset presses at 12,000 to 15,000 impressions per hour.

## Rheology:

StarFire II Inks offer excellent rheology. They have body similar to conventional offset inks and show excellent performance in the ink fountain and on the roller train, producing a consistent ink flow on press.

## Anti-Emulsification:

StarFire II Inks have excellent anti-emulsification properties that allow heavier ink film thicknesses to be carried on the press. Printers are encouraged to run StarFire II Inks to its limit. StarFire II Inks will perform well with solids as well as half tones.

## **Setting & Drying:**

StarFire II Inks set and dry very fast. This reduces "work and turn" time and improves handling time for fluorescent printed jobs. However, they do require 24 hours for full oxidation.

## **Stock:**

DayGlo® StarFire II Inks are semi-transparent. It is important to print on stocks having good whiteness and opacity. Printing on dark stock or over dark ink will result in a noticeable loss of fluorescent color. However, attractive color effects may be obtained by printing over light, clean, non-fluorescent stock or ink. StarFire II Inks are transparent enough to be trapped over black ink without a noticeable loss of black color and density.

## **Condition of the Press:**

Cleanliness of the press and, especially, of the rollers is essential for good fluorescent color brightness. If initial results are not as clean or as bright as the StarFire® II Ink color guide, the ink should be checked for possible contamination. If contamination is suspected, a small sample of the ink from the form rollers scraped down side-by-side on uncoated stock against ink from the can will usually confirm the fact. Rollers should not be pitted or cracked, as this is also a source of contamination.

## **Drying:**

DayGlo® StarFire II Inks are extremely fast setting. Infrared lamps will accelerate the setting and drying somewhat. Moderate use of non-offset spray powder is recommended for heavy ink deposits. Non-offset spray may be reduced or eliminated on normal ink deposits. The StarFire II Inks are also completely compatible with aqueous coatings. The addition of more driers to the ink may increase through drying time, but may also affect the final color and color brightness. Do not add additional driers, unless unusual conditions exist. The addition of Cobalt drier will accelerate drying, but will also darken the color and cause color instability.

## **Mileage:**

For ink estimating, the StarFire II Inks yield approximately 300,000 to 350,000 square inches per pound on coated stock and about 100,000 to 200,000 square inches per pound on uncoated stock. Ink mileage can vary greatly, however, with applied ink film thickness.

## **Types of Presses & Dampening Systems:**

StarFire II Inks will run well on a wide range of presses due to emulsification resistance. Both Dahlgren and conventional dampening systems on large presses are fully compatible with the StarFire II Inks. Also, these inks will run very clean on the integrated dampening systems of the smaller duplicator type presses.

## **Fountain Solutions:**

The StarFire II Inks work best with a fountain solution pH of 4.0 to 5.5. The addition of up to 25% isopropanol alcohol to the fountain solution will aid in anti-emulsification properties of the ink. Fountain solutions containing alcohol substitutes will work well, but ink film thicknesses may have to be reduced for optimum results.

### **Rub Resistance:**

The satin ink film of the StarFire® II Inks can burnish with rubbing, but will adhere well to the stock when dry. If additional rub protection or product resistance is desired, an overprint varnish from DayGlo Color Corp. or equivalent may be applied. All overprints should be tested to confirm that the desired results are achieved.

### **Halftones:**

Where halftones are to be printed, color strength of solid copy will be governed by the density of the halftones in the copy. StarFire II Inks will print sharp halftones at normal ink film thicknesses. To achieve maximum color effects with solid color artwork, the halftones should be minimized or eliminated.