

JAZZ™ COLORS

JAZZ Colors are a unique combination of ultra-fine, high strength, fluorescent pigment particles that are dispersed in a vehicle system that has been specifically formulated for use in energy curable inks. JAZZ Colors are fluorescent bases that can be used to produce flexographic and lithographic, ultra-violet (UV) and electron beam (EB) curable inks. They produce bright, high gloss fluorescent inks that have excellent printing characteristics.

Available Colors:

STANDARD DAY-GLO™ COLORS

JZB-11B	Aurora Pink* (Blue Shade)
JZB-11Y	Aurora Pink* (Yellow Shade)
JZB-13	Rocket Red*
JZB-14	Fire Orange*
JZB-15	Blaze Orange*
JZB-16	Arc Yellow*
JZB-17	Saturn Yellow*
JZB-18	Signal Green*
JZB-19	Horizon Blue*
JZB-21	Corona Magenta*
JZB-22	Strong Corona Magenta*
JZB-23	Strong Saturn Yellow*

PANTONE™ ** COLORS

JZB-801 PANTONE 801 Blue**
JZB-802 PANTONE 802 Green**
JZB-803 PANTONE 803 Yellow**
JZB-804 PANTONE 804 Orange**
JZB-805 PANTONE 805 Red**
JZB-806 PANTONE 806 Pink**
JZB-807 PANTONE 807 Magenta**

<u>Special</u>	<u>Color</u>
JZB-00B	Invisible Blue

Typical Physical Properties:

Grind:	6.5+ Hegman Gage, NPIRI - 0
Laray Viscosity:	15-45 Seconds @ 90°F (200 Gram weight, over 10cm)
Pigment Concentration & Type:	40-50% Thermoplastic Dyed Polymer
Vehicle Type:	Proprietary Energy Curable System
Weight Per Gallon:	10.1-10.3 Pounds
Volatile Organic Compounds:	None

*Trademark of Day-Glo Color Corp.

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

Recommended Starting Formulations:

1. **Flexographic Ink Formulation For Paper Stocks --**

40.0	DAY-GLO JAZZ Colors Base (JZB)
50.0	Ebecryl 81 ¹
10.0	Darocur 1173 ²
<hr style="width: 20%; margin-left: 0;"/>	
100.0	Total

- 2a. **Flexographic Ink Formulation For Polyethylene Film --**

40.0	DAY-GLO JAZZ Colors Base (JZB)
20.0	EP-3350 ³
30.0	HDODA ¹ (1,6-Hexanediol Diacrylate)
10.0	Darocur 1173 ²
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100.0	Total

- 2b. **Alternate Flexographic Ink Formulation For Polyethylene Film --**

40.0	DAY-GLO JAZZ Colors Base (JZB)
10.0	Ebecryl 220 ¹
10.0	Ebecryl 450 ¹
30.0	HDODA ¹ (1,6-Hexanediol Diacrylate)
10.0	Darocur 1173 ²
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100.0	Total

3. **Flexographic Ink Formulation For Polypropylene Film --**

35.0	DAY-GLO JAZZ Colors Base (JZB)
25.0	IRR-1016 ¹
5.0	Ebecryl 80 ¹
25.0	HDODA ¹ (1,6-Hexanediol Diacrylate)
10.0	Darocur 1173 ²
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100.0	Total

4. **Lithographic Ink Formulation For Paper Stocks --**

80.0	DAY-GLO JAZZ Colors Base (JZB)
13.0	Ebecryl 3608 ¹
7.0	Darocur 1173 ²
<hr style="width: 20%; margin-left: 0;"/>	
100.0	Total

¹ UCB Chemicals Corp.

² Ciba Geigy Corporation

³ Huls America Inc.

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Formulation Considerations

Oligomers and Monomers: For optimum results, all oligomer and monomer combinations should be screened for color, curing speed, and printing and adhesion properties. Proper selection of oligomers, monomers, and curing agents is necessary to maximize fluorescent color brightness. Testing has shown that some acrylated urethane oligomers and acid functional, acrylated oligomers produce cleaner, brighter colors in finished ink formulations. Thorough testing is necessary to develop the best ink formulation for each application

Manufacturing: JAZZ Colors and inks based upon JAZZ Colors contain reactive components. During the manufacturing of these printing inks the temperature of the batch should not exceed 120°F. Consult the individual Material Safety Data Sheets for additional information on safe handling procedures.

Adding Non-Fluorescent Colors: Small amounts of non-fluorescent color can be used effectively without significantly detracting from color brightness. Increases in color strength will usually compensate for any loss in brilliance. Additions of 1% or less of conventional dry color in the finished ink will result in a noticeably stronger ink without a significant change in the hue or brightness. Lightfastness will be improved with the addition of a conventional pigment of a similar hue to the fluorescent component.

Storage:

JAZZ Colors are stable. Shelf life can be maximized by making sure that JAZZ Colors and inks based upon JAZZ Colors are stored at temperatures below 100°F. Packages containing JAZZ Colors should have a head space of at least 10%.

Printing Sequence:

Fluorescent colors are sensitive to ultra-violet light used to cure the inks. Color shift and darkening can be minimized by assigning the fluorescent colors to the last printing stations on the press. Pinks and reds are more sensitive than yellows and oranges and should be the last colors that are printed.

Lightfastness:

JAZZ Colors exhibit good lightfastness for indoor applications. However, their exterior lightfastness is limited. The user should conduct individual tests to determine if the use of JAZZ Colors will meet their specific lightfastness requirements.

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