



Zydeco™ Colors

Zydeco™ Colors¹ are a unique combination of ultra-fine, high strength, formaldehyde-free, fluorescent pigment particles that are dispersed in a vehicle system that has been specifically formulated for use in energy curable inks. Zydeco 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:

PANTONE® COLORS²

ZYB-802	PANTONE 802 Green
ZYB-803	PANTONE 803 Yellow
ZYB-804	PANTONE 804 Orange
ZYB-805	PANTONE 805 Red
ZYB-806	PANTONE 806 Pink
ZYB-807	PANTONE 807 Magenta

Additional Colors

ZYB-00B	Invisible Blue
ZYB-17	Saturn Yellow®

PANTONE 801 Blue	80 parts	ZYB-00B Invisible Blue
	20 parts	Sun Chemical Spectraray SF Blue 15:3

Typical Physical Properties:

Grind:	6.5+ Hegman Gauge, NPIRI – 0
Laray Viscosity:	20-40 seconds @ 90°F (200 gram weight, over 10cm)
Pigment Concentration & Type:	45-55% Thermoplastic Dyed Polymer
Vehicle Type:	Proprietary Energy Curable System
Weight Per Gallon:	10.1-10.3 Pounds
Volatile Organic Compounds:	None

¹ Trademark of Day-Glo Color Corp.

² Trademark of Pantone LLC.

Recommended Starting Formulations:

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

40.0	DayGlo Zydeco Colors Base (ZYB)
50.0	Ebecryl 81 ¹
<u>10.0</u>	Darocur 1173 ²
100.0	Total

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

40.0	DayGlo Zydeco Colors Base (ZYB)
20.0	Adhesion Resin EP-3350 ³
30.0	HDODA ¹ (1,6-Hexanediol Diacrylate)
<u>10.0</u>	Darocur 1173 ²
100.0	Total

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

40.0	DayGlo Zydeco Colors Base (ZYB)
10.0	Ebecryl 220 ¹
10.0	Ebecryl 450 ¹
30.0	HDODA ¹ (1,6-Hexanediol Diacrylate)
<u>10.0</u>	Darocur 1173 ²
100.0	Total

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

35.0	DayGlo Zydeco Colors Base (ZYB)
25.0	IRR-1016 ¹
5.0	Ebecryl 80 ¹
25.0	HDODA ¹ (1,6-Hexanediol Diacrylate)
<u>10.0</u>	Darocur 1173 ²
100.0	Total

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

80.0	DayGlo Zydeco Colors Base (ZYB)
13.0	Ebecryl 3608 ¹
<u>7.0</u>	Darocur 1173 ²
100.0	Total

¹ Allnex Belgium SA/NV

² BASF USA

³ Evonik Industries AG

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:

Zydeco Colors and inks based upon Zydeco Colors contain reactive components. During the manufacturing of these printing inks the temperature of the batch should not exceed 120°F. Consult the individual 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:

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

Printing Sequence:

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

Lightfastness:

Zydeco 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 Zydeco Colors will meet their specific lightfastness requirements.