

JZO COLORS

Fluorescent Bases for UV/EB Offset

JZO Colors are high strength fluorescent colors that are dispersed in a unique vehicle system specifically formulated for use in energy curable inks. JZO Colors are fluorescent bases that are specifically designed for offset printing in ultra-violet (UV) and electron beam (EB) curable inks. They produce bright, high gloss fluorescent inks that have excellent printing characteristics.

Available Colors:

Pantone™** Colors

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

Special

Color

JZO-00

Invisible Blue

Typical Physical Properties:

Grind:	6.5+ Hegman Gage, NPIRI-0
Laray Viscosity:	20-45 Seconds@90F (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

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

Recommended Starting Formulation:

The following formulation is a recommended starting point for preparation of offset ink. Modifications may be needed for individual applications.

Lithographic Ink Formulation For Paper Stocks:

80.0%	JZO BASE
6.0%	RCC 13-711 or Photomer RM-444 ¹
8.0%	Photoinitiator
3.5%	R-972 ² (hydrophobic fumed silica)
2.5%	Monomer (for viscosity adjustment)
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100.0%	

Formulation Considerations:

Oligomers and Monomers: For optimum results, all oligomer and monomer combinations should be screened for color, curing speed, printing, and adhesion properties. Proper selection of oligomers, monomers, and curing agents is necessary to maximize fluorescent color brightness.

Fountain Solutions: JZO has excellent compatibility with most fountain solutions. However, it is recommended to test for each specific application in order to achieve optimum results.

Manufacturing: JZO Colors and resulting inks contain reactive components. During the manufacturing of these printing inks the temperature of the batch should not exceed 120F. 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.

¹ Cognis

² Degussa

Storage:

JZO colors are stable. Shelf life can be maximized by making sure that JZO colors and resulting inks prepared from JZO colors are stored at temperatures below 100F. Packages containing JZO 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. 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:

JZO 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 JZO colors will meet their specific lightfastness requirements.