



Invisible Blue Base

MT-6172-IB

DayGlo® MT-6172-IB Invisible Blue Base contains 50% of a blue-white ultraviolet fluorescent sub-micron sized pigment dispersed in a modified alkyd vehicle suitable for making high quality sheetfed offset, web-offset heatset and letter presses inks. MT 6172 IB Invisible Blue Base contains only "clean" ink oil solvents and does not contain any waxes.

Inks made from MT-6172-IB Invisible Base are relatively invisible in normal daylight when applied in thin ink films, but are highly visible as a blue-white fluorescence when viewed under standard "black light" (long wave ultraviolet light at 365 nm) or under short wave ultraviolet (253.7 nm).

Inks made from MT-6172-IB Invisible Blue Base may be used to print on a wide variety of white and colored paper substrates, or the ink can be blended with conventional colored printing inks to produce colored inks that fluoresce under long or short wave UV light.

Invisible inks are normally used for various security applications such as printing bank notes, lottery tickets, airline tickets, record jackets, coupons, advance sales tickets, gift certificates, direct mail reply cards or any documents needing to be easily and positively identified.

Specifications:

Laray Viscosity	150 -180 Sec. @ 90°F (32°C), 900 Gr. Wt. (Over 10 cm)
Pigment	50 +/- 2% Thermoset Dyed Polymer
Vehicle Type	Hydrocarbon Resin Modified Alkyd
Non-Volatile Solids	80 +/- 2%
Volatile	530-590°F (276-310°C) Distillation Range
Weight Per Gallon	9.4 Lbs./Gal.

Typical Formulations:

Leave In Sheetfed Offset Ink:

DayGlo® Invisible Blue MT-6172-IB	48.0
Gloss Quickset Vehicle	39.0
Micronized Polyethylene Wax	2.0
DayGlo Velex Tack Reducer TR-052	8.0
6% Cerium Octoate Drier ¹	2.0
Micronized PTFE Powder	1.0
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<i>Tack=12-14 @1200 RPM/90°F</i>	100.0
<i>10 min. Tack Rise=3.0 @1200 RPM/90°F</i>	

Web Offset Heatset Ink:

DayGlo Invisible Blue MT-6172-IB	48.0
Low Energy Heatset Vehicle	42.0
Micronized PTFE Powder	2.0
Magie 500 Oil ²	6.0
Kodaflex TXIB ³	2.0
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<i>Tack=10-12 @1200 RPM/90°F</i>	100.0
<i>10 min. Tack Rise= 10.0 @1200 RPM/90°F</i>	

Fluorescent Blue Sheetfed Offset Ink:

DayGlo Invisible Blue MT-6172-IB	56.0
Green Shade Phthalo Blue Flush	24.0
Gloss Quickset Vehicle	16.0
Micronized Polyethylen Wax	2.0
Micronized PTFE Powder	1.0
6% Cerium Octoate Drier ¹	0.4
6% Manganese Lin-All PI Drier ⁴	0.4
6% Cobalt Lin-All PI Drier ⁴	0.2
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<i>Tack= 12-14 @1200 RPM/90°F</i>	100.0
<i>10 min. Tack Rise= 5.0 @1200 RPM/90°F</i>	

When formulating invisible blue inks, raw materials such as varnishes and wax compounds should be selected for the lightest possible color and for non-yellowing characteristics so the ink film will not yellow or darken. Cerium drier is recommended for the least amount of color change.

¹ Shepherd Chemical Co.

³ Eastman Chemical Products Inc.

² Magie Bros. Oil Co.

⁴ OMG, Inc.