

FASCURE ULTRA

UV Ink for Multiple P.O.P. Substrates

Features

- ▶ Very Wide Adhesion Range
- ▶ Fast Cure Speed
- ▶ Excellent Water Resistance
- ▶ Low Viscosity Rheology
- ▶ Ideal for In-Line Presses
- ▶ Superior Flexibility

Substrate Application

Fluted Polyolefin (Coroplast™)

Polyethylene Banner Materials

Polystyrene

Coated Paper and Board Stocks

Most Vinyl Banner Materials

Most Static Cling Vinyls

Pressure Sensitive Vinyls

Linear Polyethylene

SERICOL
More than ink...Solutions.™

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Thinning

Stir well before every use. Fascure Ultra inks are supplied in a press ready condition for most printing applications. For certain printing conditions it may be necessary to thin slightly (3-5% with ULT-TH Thinner).

Mesh

Fascure Ultra prints and cures well through 355-380 (150 to 160/cm) plain weave monofilament polyester. **For optimum performance, every endeavor should be made to minimize ink film thickness. Heavier ink deposits are a source of cure issues such as blocking problems and adhesion failure.**

Stencils

Stencil materials must be solvent resistant and produce a thin film stencil (3-6 microns over mesh). Xtreme AST 210/220 emulsion is recommended to give the highest print quality, minimize deposit variables, and improve economy.

Curing

Ultraviolet curable inks are dependent on a high dosage of intense ultraviolet light in a spectral range between 250 and 360 nanometers to initiate cure. Light energy must penetrate the entire ink layer to achieve proper cure and ink performance.

In a curing unit containing one 200-watt/inch (80 watt/cm) lamps, Fascure Ultra inks will normally cure at approximately 50-70 feet (15-18 m) per minute. Cure speeds are dependent on colors, film thickness, opacity, and condition of the curing unit. For best results, ink should be cured immediately after printing.

If under-cure is experienced with any color, demonstrated through a wet film, film wrinkling or loss of gloss, it is usually due to excessive ink deposit. To correct this, press mechanics, such as mesh, squeegee, color density, belt speed, or the amount of UV energy, must be changed.

Reduction of color density is easily achieved by letting the color down with MX (Mixing Clear) or for halftones HTX until proper cure is obtained.

Adhesion should be at least 80% immediately out of the reactor with final adhesion developing in two to four hours. If total cure on a given substrate with a specific color needs to be established, the piece should be passed through the reactor one or two more times. This will usually simulate final adhesion.

In situations where very low dyne level (36 or less) substrates are used, adhesion may be improved with the addition of up to 5% adhesion modifier (ULT-AM).

Coverage

Standard line colors should yield a coverage of 3000-3800 square feet/gallon (73-93m²/liter) provided the ink deposit is between .40 and .55 mil. thick (10 and 13 microns).

Wash Up

Wash up on press with Xtend™ press washes and after the production run with Xtend™ ink degradents.

Pre-Production Test

Fascure Ultra has been formulated to adhere to most treated polyolefin substrates with measured surface tension levels of 42-46 dyne/cm² or higher. However, it is strongly recommended that all substrates be tested before use as supposedly similar substrates can vary between different manufacturers and even between different batches from the same manufacturers.

Certain other plastics may be impregnated with lubricants which, like plasticizer migration, may impair adhesion and block resistance even a considerable period after printing. Other plastics can become brittle or caused to curl after printing.

**IMPORTANT:
END-USER MUST DETERMINE SUITABILITY OF
THIS PRODUCT FOR THE INTENDED USE
PRIOR TO PRODUCTION.**

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Post Print Recommendations

Success of post printing processes such as hemming, sewing, and/or grommeting is very ink film thickness related. Thin ink films (10 to 15 micron) are more flexible and will, therefore, be more successful in these finishing processes.

ALWAYS PRE-TEST FINISHING PROCESS(ES) PRIOR TO PRODUCTION.

Outdoor Use

Accelerated weathering tests indicate Fascure Ultra has an exterior life of up to one year on most materials. Substrate life can vary and may cause premature product degradation.

Color Availability

The Fascure Ultra standard color range includes the nine base Seritone Matching System (SMS) colors, standard colors, and halftone colors.

The Seritone Matching System

The Seritone Matching System has been designed to enable printers to readily simulate PANTONE®* and most other colors in-house. The system consists of nine SMS base colors, each of which has been selected for its cleanliness of tone and suitability for intermixing. Using the SMS base colors plus Shading Black and Mixing Clear, almost any color can be produced.

Standard Halftone Colors

Fascure Ultra standard halftone colors are matched to "SWOP" standards (Specification Web Offset Publication). The densities are slightly higher than SWOP under most conditions and, therefore, offer scope for adjustment with the addition of halftone extender base (ULT-HTX).

Standard Colors

ULT-111	Lemon Yellow
ULT-123	Medium Yellow
ULT-141	Fire Red
ULT-155	Rubine Red
ULT-180	Warm Red

ULT-190	Process Blue
ULT-205	Reflex Blue
ULT-210	Ultra Blue
ULT-221	Emerald Green
ULT-301	Opaque Black
ULT-009	Iron Black
ULT-311	Opaque White
ULT-026	Brilliant White

Seritone Matching System Colors

ULT-064	SMS Yellow GS (Green Shade)
ULT-066	SMS Yellow RS (Red Shade)
ULT-114	SMS Orange
ULT-121	SMS Red YS (Yellow Shade)
ULT-164	SMS Red BS (Blue Shade)
ULT-165	SMS Magenta
ULT-127	SMS Violet
ULT-230	SMS Blue
ULT-325	SMS Green
ULT-TW	Tinting White
ULT-SB	Shading Black
ULT-MX	Mixing Clear
ULT-OP	Overprint Clear

Halftone Colors

ULT-HTY	Halftone Yellow
ULT-HTR	Halftone Red
ULT-HTB	Halftone Blue
ULT-HTK	Halftone Black
ULT-IHY	Intense Halftone Yellow
ULT-IHR	Intense Halftone Red
ULT-IHB	Intense Halftone Blue
ULT-IHK	Intense Halftone Black
ULT-HTX	Halftone Extender Base
ULT-LVX	Low Viscosity Extender Base
ULT-HVX	High Viscosity Extender Base

Reducers/Modifiers

ULT-TH	Thinner
ULT-AM	Adhesion Modifier

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

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Intense Halftone Colors

Fascure Ultra intense halftone colors are considerably higher in density than "SWOP" standards. ULT-HTX can be used to adjust color density.

Special Matches

Special colors can be supplied against prints, wet ink, PANTONE® numbers, or other Sericol standard colors.

Metallic Powders

Metallic powders may be mixed with Fascure Ultra Mixing Clear (ULT-MX). The recommended mixing ratios are 8% by weight of silver powder and 20% of gold powder. Due to the possibility of chemical changes after mixing, it is highly recommended that metallic shades be mixed daily.

Reducers/Modifiers

Fascure Ultra colors are supplied at a press ready viscosity for most printing applications. It may be necessary to thin slightly (3%-5%) with ULT-TH for special applications Fascure Ultra Mixing Clear

or halftone extender (ULT-MX or ULT-HTX) may be used to reduce the strength of a color with minimal effect of viscosity

Storage

Containers should be tightly closed immediately after use. At the end of long printing runs, surplus ink from the screen should be disposed of. Fascure Ultra inks and reducers should not be stored in direct sunlight or extreme temperatures. Refer to Material Safety Data Sheet (MSDS) for materials and conditions to be avoided.

In the interest of maximum shelf life, storage temperatures should be between 50°F (10°C) and 77°F (25°C). When stored under these conditions the maximum shelf life is shown by the use by dates, which are clearly marked on all ink containers.

Safety and Handling

Refer to MSDS for safety, handling, and waste disposal information.

The information and recommendations contained in this Technical Data Sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason, our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Technical Data Sheet out of date and users are requested to ensure that they follow current recommendations.

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Last Revised: April 8, 2004