

SERIDISC DVD

UV Screen Inks for Optical Media Printing

SERICOL
More than ink...Solutions.
FUJIFILM

Features

- Formulated for Extremely Low Shrinkage to Increase DVD Replication Latitude
- Very Fast Cure Rates (30mJ/cm² for Scan Pass Processing and 200mJ/cm² for Full Cure Processing)
- Smooth, High Gloss Finish
- Press Ready – No Additives or Modifiers
- Incorporates Unique “Soft Gel” Rheology – Will Not Drip Through Mesh
- Ideal Viscosity for Both In-Line and Off-Line Printing Equipment
- Superior Print Performance – Resulting in High Definition Four Color Process Picture Quality
- Excellent Adhesion to Polycarbonate and Major UV Spin Coat Varnishes
- SeriDisc Inks Do Not Contain N-Vinyl-2 Pyrrolidone (NVP), Amines, or Any Volatile Materials Which Can Fog Compact Discs.

Substrate Application

DVD Formats

CD Formats

Mesh

SeriDisc DVD prints and cures well through 355/in to 380/in (140 to 185/cm) monofilament polyester meshes. 355.31 and 380.31 Plain Weave, or 380.34 Twill Weave are recommended for both solid donuts and fine copy.

Stencils



Stencil materials must be solvent resistant and produce a thin film

stencil (3-6 microns over mesh). The ultra-high resolution, and ease of use built into Xtreme Screen 2.0 provide consistency and quality. The unique chemistry inherent in Xtreme Screen 2.0 also gives exceptional durability during long print runs.

It is significantly more durable than traditional capillary film, and a match to the toughest dual cure and photopolymer liquid emulsions. Alongside a high level of print performance, Xtreme Screen 2.0 offer the end user consistent results over a wide range of operating conditions.

Every aspect of performance, from exposure through stencil development, to print quality has been optimized to ensure reliability of image from screen to screen.

Fujifilm Sericol's use of the latest stretching equipment, and tight quality control procedures guarantees a match to your specific tolerances, ensuring a dependable source of supply.

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. SeriDisc DVD inks are formulated to cure at maximum production rates of most Kammann, Autoroll, ODME, Omso, Dubuit, Hanky and Teca-Print optical disc printing equipment. SeriDisc DVD inks will achieve full cure upon receiving 200mj/cm². SeriDisc DVD will achieve tack free cure with the use of a scan pass cure (30mj/cm²).

Cure speeds are dependent on ink film thickness, opacity, color mixed, UV lamp intensity, reflector geometry, and reflector focal point. If under-cure is experienced with the SeriDisc DVD inks, typically demonstrated by a wet ink film or loss of gloss, it is usually due to excessive ink film deposit.

To correct this, the pre-press and press mechanics, such as mesh, squeegee, color density, or the amount of UV energy, must be changed. Adhesion, according to industry standard tests, should be satisfactory immediately upon exiting the printing press with optimum adhesion developing in two to four hours.

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Technical Service:
800.737.4265



Customer Service:
800.255.4562

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TDS/Revised 10/09 | 1

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Coverage

SeriDisc DVD colors should yield coverage of 25,000 to 35,000 full coverage discs per US gallon.

Wash Up

Wash up on press with Xtend™ Press Washes and after the production run with Xtend™ Ink Degradents.

Pre-Production Test

SeriDisc DVD inks are formulated to adhere to most UV spin coat varnishes and bare polycarbonate. However, it is strongly recommended that all applications be thoroughly tested before use in production. Type of spin coat varnish, depth of cure, surface hardness, delay between application of spin coat varnish and SeriDisc DVD inks may affect printability, adhesion, and performance.

On-Disc Performance Testing

SeriDisc inks pass all industry standard electrical tests. All values were found to be well within industry specifications.

Color Availability

The SeriDisc DVD color range includes nine base Seritone Matching System (SMS) colors, three metallic pastes, opaque and shading blacks and whites, and the four color halftone shades.

The Seritone Matching System

The Seritone Matching System is designed to enable printers to quickly and effectively match the PANTONE®* 1000 shades. The system consists of nine SMS base colors, each of which is selected for its cleanliness of tone and suitability for intermixing. Using the SMS base colors plus Shading Black, Tinting White, and Mixing Clear, almost any color can be produced.

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

Halftone Colors

SeriDisc DVD halftone colors are matched to "SWOP" standards (Specification Web Offset Publication) when printed through a 460.27 Plain Weave mesh depositing approximately 10 to 12 microns of ink. If SWOP standards are used for color separations, no adjustment will be needed to the SeriDisc color density. Color density can be reduced with DVD-MX Halftone Extender Base/Mixing Clear.

Special Color Matches

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

Standard Colors

DVD-064 SMS Yellow GS (Green Shade)
DVD-066 SMS Yellow RS (Red Shade)
DVD-114 SMS Orange
DVD-121 SMS Red YS (Yellow Shade)
DVD-127 SMS Violet
DVD-164 SMS Red BS (Blue Shade)
DVD-165 SMS Magenta
DVD-230 SMS Blue
DVD-325 SMS Green
DVD-SB Shading Black
DVD-301 Opaque Black
DVD-TW Tinting White
DVD-311 Opaque White
DVD-327 High Speed White-Gloss
DVD-328 High Speed White-Satin

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Halftone Colors

- DVD-HTY Halftone Yellow
- DVD-HTR Halftone Magenta (Red)
- DVD-HTB Halftone Cyan (Blue)
- DVD-HTK Halftone Black
- DVD-MX Halftone Base/Mixing Clear

Thinners/Specialty/Metallic Pastes

- DVD-MMC Metallic Mixing Clear
- ARS 20308 Rich Gold (GS) UV Metallic Paste/Quart (4.75 lbs.)
- ARS 20307 Pale Gold (RS) UV Metallic Paste/Quart (6 lbs.)
- ARS 20306 Silver UV Metallic Paste/Quart (2.80 lbs.)

For Blu Ray metallic applications, OM-MG R2U Metallic 877 Grey is recommended in lieu of ARS20306 Silver UV Metallic Paste and ARS20307 Gold RS UV Metallic Paste

Safety and Handling

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

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. SeriDisc 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.