

SERIDISC CDT

UV Specialty Coatings for Optical Disc Recordables

Features

- Designed for use as a Durable Overprint (DOC) Clear
- Excellent Print Receptivity to Thermal Transfer Print Process
- Low Shrinkage Values
- Press Ready – No Additives or Modifiers
- Extremely Fast Cure Rates
- Ideal Viscosity for Automated CD Printing
- Equipment - Will Not Drip Through Mesh
- Available in Matte and Gloss Finishes in both White and Clear
- Superior Adhesion to Most UV Spin Coat Varnishes
- SeriDisc Inks Do Not Contain N-Vinyl-2- Pyrrolidone (NVP), Amines, or Any Volatile Materials Which Can Fog Compact Discs.
- Passes All Industry Electrical and Environmental Tests

Substrate Application

CD/DVD - Recordable

Mesh

SeriDisc CDT 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 provides 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 offers 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 CDT is formulated to cure at maximum production rates of most Kammann, Autoroll, ODME, Omso, Dubuit, Hanky and Teca-Print compact disc printing equipment. SeriDisc CDT will achieve full cure upon receiving 250mj/cm². SeriDisc CDT inks may have some difficulty with the use of a scan cure pass. It is recommended that the press be set up to provide the SeriDisc CDT ink with a full stop under an UV lamp.

Cure speeds are dependent on ink film thickness, opacity, color mixed, UV lamp intensity, reflector geometry, and reflector focal point.

PLEASE NOTE: The thermal print receptivity of the SeriDisc CDT will be reduced with an increased number of passes under the UV lamps. It is recommended that the SeriDisc CDT ink be applied in the last station when possible to minimize the number of passes through the UV lamps.

If under-cure is experienced with the SeriDisc CDT inks, typically

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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.

Coverage

SeriDisc CDT inks should yield a 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 degradants.

Pre-Production Test

SeriDisc CDT inks are formulated to adhere to most UV spin coat varnishes and inks. 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 CDT inks may affect printability, adhesion, and performance.

On-Disc Performance Testing

SeriDisc inks pass all industry standard electrical tests. Discs with multiple ink layers were aged in an environmental chamber for a total of 1000 hours at 85°C with 95% relative humidity. At 250 hour intervals, discs were removed from the chamber and evaluated for performance. Test parameters included: BLER, BERL, reflectivity, all I and E error types, and radial noise. Physical data on deviation, eccentricity, deflection, pit symmetry, push

pull, birefringence and cross talk were also measured. All values were found to be well within industry specifications.

Standard Products

CDT-701	Thermal Rec Gloss White
CDT-751	Thermal Rec Matte Clear
CDT-752	Thermal Rec Satin Clear
CDT-753	Thermal Rec Gloss Clear
DVD-MMC	Metallic Mix Clear

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 to avoid possible contamination issues. SeriDisc CDT series inks should not be stored in direct sunlight or extreme temperatures. Please refer to the 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.