PRODUCT DATA SHEET

CDS SERIES (CDS-000)

PRODUCT DESCRIPTION

Kolorcure's CDS inks have been developed together with the CD decorator to maximize print quality, productivity, and profitability for the CD manufacturer. CDS series inks have passed all environmental testing conducted by the AUDIO and CD-ROM industry, including the Phillips Specification UAN-L253 21 day cyclical humidity exposure test. The ink's rheology provides excellent flow out during high speed production and quickly recovers to a gel viscosity when the press stops. All CDS inks are amine free to prevent fogging on the read side of the disc when stacked on a spindle.

RECOMMENDED SUBSTRATES

CDS Series adheres well to all commercial spin coat CD lacquers and to the polycarbonate DVD disc.

PHYSICAL PROPERTIES

Solids:	100%
Weight/U.S. Gallon:	9.0 lbs
Viscosity:	4000-8000 cps at 25°C
Flash Point:	Greater than 200°F (93°C)
Shelf Life:	6 months at 77°F

DIRECTIONS FOR USE

Pretest for adhesion to all substrates prior to production printing, as well as, other properties to determine suitability. Mix well prior to each use.

Surface - A clean dry surface is preferred for superior adhesion.
Mesh - Monofilament polyester or nylon, 350-390 mesh per inch recommended, Acceptable 305-420 mesh per inch. (Open area should not exceed 30%).
Stencil - Lacquer proof, most direct or direct/indirect work well.
Squeegee - An 80 durometer (Shore A Hardness) polyurethane is recommended. It should be well sharpened.
Screen Wash Up - A special high flash point wash containing no hydrocarbon solvents should be used, such as KOLORCURE'S UVW-80 Screen Wash.
Screening equipment - Hand, semi-automatic, or fully automatic presses.

ADDITIVES

To lower the viscosity which will enhance the transfer of the ink through the screen, use Thinner #2 (Diluent).
To increase curing speeds add Activator #7 (Sensitizer).
To eliminate bubbles resulting from the screening process, add Anti-Bubble.
To eliminate "fish eyes" in the wet ink film add Flow Promoter.
Use CDS-100 Mixing Base as an extender to enhance cure and adhesion.
Use CDS-400 H/T Mixing Base as an extender to reduce color strength of Process colors and to increase the viscosity of standard colors for fine line copy.
Thickening Powder can be used when color strength can not be altered.
Flattening Powder is available to reduce gloss.

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CURING AND CURING EQUIPMENT

CDS inks cure in air upon brief exposure to a focused high intensity ultraviolet light source. A standard 200-300 watt per inch medium pressure mercury vapor lamp should be used. For an optimal cure a 200-250 millijoule window is required. If a loss of gloss or adhesion occurs due to insufficient cure, the use of mixing base will increase light penetration and improve cure. In addition faster curing speeds can also be achieved by adding 3-5% liquid sensitizer.

FILM THICKNESS

Recommended 0.4 to 0.6 mil (10-15 microns).

COVERAGE

Using 390 monofilament polyester mesh, CDS Series will yield an average of 3200 square feet per gallon.

STORAGE AND HANDLING

All KOLORCURE photopolymer inks and coatings should be stored in a cool dry area: 80°F (27°C) or below. Keep these inks and coatings away from direct sun light and indirect white light. Do not use these inks and coatings in areas having fluorescent lights overhead. Keep these inks and coatings away from internal heat sources.

SPECIAL NOTES

All UV inks and coatings are sensitive to contamination. Use only new screens or those previously used for UV printing. Do not add any conventional ink or solvents to the inks. They are most likely not compatible and will destroy all properties.

WARNING

The use of goggles, gloves, and protective clothing is recommended. Avoid prolonged breathing of vapors. Contact of liquid material with the skin may be irritating; wash exposed area thoroughly with soap and water. Contact of liquid with the eyes may cause injury – effects may be delayed; flush eyes with large amounts of water for 15 minutes and call a physician. Like most polymers, the properly –cured resins are considered largely inert.

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