

Technical information

Screen Inks



Micro Disc - UCD

Fast Cure Speed, High Gloss Finish, Opaque

UV Screen Inks for CD & CD-R



Substrates:

UV cure inks for CD, CD-R, DVD, DVD-R

Application

Micro DISC -UCD are the specially formulated, fast curing, low odour U.V. curing screen printing inks for printing on compact discs and on polycarbonate. They have excellent adhesion to all commonly used UV cured protective lacquered discs and on polycarbonate. They are thixotropic in nature, ready to use, with excellent print performance

Characteristics

- Very fast cure speed - suitable for rapid production
- Excellent flexibility and inter -coat adhesion Thixotropic in nature- does not drip through mesh when the machine is standstill
- High colour strength for the range of shades and matching system
- Very low shrinkage - meets the requirements of mechanical parameters.

Curing

Ultraviolet cure inks are dependent on high dosage of UV light to initiate curing process that converts from wet to dry film. The light must see through or penetrate the layer of inks to achieve proper cure

In a curing unit containing one 300 -watt/inch(120 watt/cm) lamp, the cure speed of 14 -35 meter per minute are common
Cure speed depends on colours, film thickness, opacity, power of UV lamps and condition of the curing unit

Range

Micro DISC -UCD Matching System: Almost any shade can be matched by mixing the selective inks of the matching system which comprises of the basic shades as follows which comprises of the basic shades as follows :

Match Light Yellow	UCD - 101	Match Violet	UCD - 141
Match Mid Yellow	UCD - 102	Match Ultra Blue	UCD - 151
Match Deep Orange	UCD - 111	Match Deep Blue	UCD - 152
Match Scarlet Red	UCD - 121	Match Green	UCD - 161
Match Carmine Red	UCD - 122	Match Tinting White	UCD - 171
Match Magenta	UCD - 131	Match Tinting Black	UCD - 181
Mixing Clear Base	UCD - 191	Mixing Extender Base	UCD - 192

Spot Colours

Bright Yellow	UCD - 201	Reflex Blue	UCD - 251
Light Orange	UCD - 211	Yellow Green	UCD - 261
Vermillion	UCD - 221	Grass Green	UCD - 262
Brilliant Red	UCD - 223	Forest Green	UCD - 263
Purple	UCD - 241	Opaque White	UCD - 271
Sky Blue	UCD - 251	Brilliant White	UCD - 272
Royal Blue	UCD - 252	Dense Black	UCD - 281
		Matt White	UCD - 275

Process Colours :

Cyan	UCD - 401	Density : 1:5
Magenta	UCD - 402	Density : 1:4
Yellow	UCD - 403	Density : 1:3
Black	UCD - 404	Density : 1:8

The density values are arrived at by using 150.31 T mesh. By adding Extender Base UCD - 192, the ink density can be reduced. The ink density can be increased by adding ink concentrates for the process colours in required proportion or by using a coarser mesh

Metallic Inks (Bronzes) :

Rich Gold	SH - 801
Rich Pale Gold	SH - 802
Pale Gold	SH - 803
Silver	SH - 804
Metallic Clear Base	UCD - 191

The metallic ink made by mixing the metallic pigment with Metallic Clear Base should be processed within 6-8 hours

Yield : A very high yield of 75-95 sq. meters. with 140.34T to 165.31T can be achieved

Auxiliaries

Reducer : Stir well before use. The viscosity of Micro Disc - UCD is supplied in a press ready condition for most printing applications. It may be necessary to thin slightly up to 2-4% with Curable Reducer UAX-901

UAX - 278 UV Gel Tack Reducer

Maximum 5% may be added to reduce tack and colour strength of ink without changing viscosity.

UAX - 283 UV Screen Initiator for Black and Dark Colours

Maximum 5% may be added to increase curing rate of UCD inks.

UAX - 284 UV Screen Initiator for White and Tint Colours.

Maximum 5% may be added to increase curing rate of UCD inks

UAX - 206 UV Screen Cleaning Aid

Over Print Varnish UCD-193 : For improvement of scratch resistance of the print

Accessories :

Fabrics : Micro Disc - UCD prints and cures well through mesh between 355-420 per inch (140-165 per cm.) mono filament polyester

Stencils : Stencil material must be solvent resistant and produce thin film stencil (3-6 microns over mesh.)

Squeeze : Generally 70-80 durometer sharp edge squeezes are suitable

Material Safety Data Sheet is available on request

Note : The Technical information sheet reflects the current state of our knowledge. This information is compiled based upon field experience and extensive laboratory testing. However, customers are requested to satisfy themselves that the products meet their requirements in all respects before starting a print run. Since the printing conditions are not under our control, no guarantee can be given for their performance.