

Technical information

Screen Inks



Micro UV - UPX

Fast Cure Speed, Satin Finish, Opaque

UV Screen Inks for Graphics & Packaging



Substrates:

UV cure inks for flexible and rigid PVC, Polystyrene, HIPS, Polycarbonate, Acrylic, Cellulose acetate, pretreated polyethylene & polypropylene, fluted PP/corropack/sunpack and variety of papers

Application

Micro UV -UPX is the range of specially designed, fast curing, low odour UV screen printing inks with bright opaque shades. It has excellent flexibility, adhesion, weather resistance and most common solvent resistance. Micro UV -UPX has high gloss and it thixotropic in nature giving excellent print sharpness. Widely applicable for outdoor display, advertising panels, signs, window graphics, labels and self-adhesive stickers and packaging containers. They are V -Pyrol free

Characteristics

- Excellent light fastness property due to specialized fade resistance pigments used (Blue wool scale 7 -8)
- Excellent flexibility, adhesion, weather resistance, alcohol and petrol resistance
- Very fast cure speed -suitable for rapid production
- Thixotropic in nature - does not drip through mesh when the machine is standstill
- Ideal for 4 -colour process inks job
- High colour strength for the range of shades and matching system
- Non-toxic, meets EN- 71 part 3 Toy safety standard for heavy metals

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 ink to achieve proper cure

In a curing one 200-watt/inch (80 watt/cm) lamp, the cure speed 14-35 meter per minute are common.

Cure speed depends on colours, film thickness, opacity and condition of the curing unit

Range

Micro UV-UPX Matching System : Almost any shade can be matched by mixing the selective inks of the matching system

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

Spot Colours

Bright Yellow	UPX - 201	Reflex Blue	UPX - 253
Light Orange	UPX - 211	Yellow Green	UPX - 261
Vermilion	UPX - 221	Grass Green	UPX - 262
Brilliant Red	UPX - 223	Forest Green	UPX - 263
Purple	UPX - 241	Opaque White	UPX - 271
Sky Blue	UPX - 251	Brilliant White	UPX - 272
Royal Blue	UPX - 252	Dense Black	UPX - 281

Process Colour :

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

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

A coat of Over Print Varnish UPX-193 on the whole printed area will extend the period of out-door fade resistance and scratch resistance

Metallic Inks (Bronzes) :

Rich Gold	SH - 801
Rich Pale Gold	SH - 802
Pale Gold	SH - 803
Silver	SH - 804
Metallic Clear Base	UPX - 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 UV - UPX is supplied in a press ready condition for most printing applications. It may be necessary to thin slightly up to 3-5% with Curable Reducer UAX-901 cylinder press users as a special application

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 UPX inks.

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

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

UAX - 206 UV Screen Cleaning Aid

Over Print Varnish UPX-193 : For improvement of fade resistance of the print

Accessories :

Fabrics : Micro UV-UPX 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