

Technical information

Screen Inks



Micro Pack - PK

Quick Drying, Glossy Finish, Opaque

Screen Inks for Packaging



Substrates:

Pre-treated Polyethylene, Polypropylene, Coated substrates, Thermosetting plastics.

Application

Micro PACK - PK inks are specially formulated solvent based quick drying inks to print packaging containers and articles of polyethylene, HDPE, polypropylene. These inks are suitable for high-speed automatic printing machines. The surface of these substrates should be pre-treated by flaming or corona discharge so as to get surface tension of 42-44 dynes/cm which is necessary for the adhesion of the ink. For polypropylene, the surface can also be pre-treated by applying a thin coat of PP Primer AX-701.

By adding Hardener HDR-601, the ink can also be used to print on thermosetting plastics, and coated substrates. With the addition of the hardener, further improvement in respect to adhesion, mechanical resistance, water resistance and resistance to lubricants and detergents can be achieved. The **Mixing ratio** of ink and Hardener **HDR-601** is **10:1** by weight and the **Pot-life** of the mixture of ink and hardener will be **8 to 10 hours** at room temperature of 25°C.

Characteristics

- Quick drying solvent based inks - suitable for rapid production
- Good printability and screen stability
- Excellent adhesion
- High gloss finish
- High weather resistance and moderate fade resistance
- Non-toxic, meets EN- 71 part 3 Toy safety standard for heavy metals*

Drying

The print becomes tack free dry in 5 to 8 minutes and hard dry in 30 to 45 minutes at a temperature of 25°C making them suitable for stacking.

It takes about 1 to 2 minutes to become tack- free dry when passed through a tunnel oven at 50to 70°C.

Range

Micro PACK-PK 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 :

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

Spot Colours :

Bright Yellow	PK - 201	Sky Blue	PK - 251
Light Yellow	PK - 301	Royal Blue	PK - 252
Mid Yellow	PK - 302	Reflex Blue	PK - 253
Light Orange	PK - 211	Yellow Green	PK - 261
Deep Orange	PK - 311	Grass Green	PK - 262
Vermilion	PK - 221	Forest Green	PK - 263
Scarlet	PK - 322	Opaque White	PK - 271
Brilliant Red	PK - 223	Brilliant White	PK - 272
Purple	PK - 241	Dense Black	PK - 281

*Note : PK -301, PK -302, PK -311, PK -322 are Lead containing inks which do not comply with EN-71.3

Process Colours:

Cyan	PK - 401
Magenta	PK - 402
Yellow	PK - 403
Black	PK - 404

By adding Extender Base PK -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.

Yeild : 65-75 sq. meters. (with 120.34 mesh and 10-15% dilution with Reducer/ Retarder)

Metallic Inks (Bronzes) :

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

Recommended mixing ration of Metallic Gold Pigment with PK -191 (without hardener) is 1:4 to 1:6

Recommended mixing ration of Metallic Silver Pigment with PK -191 (without hardener) is 1:4 to 1:6

Mixing ratio of mixture of metallic pigment and Clear Base with Hardener HRD-601 is 10 : 1

The metallic ink made by mixing the metallic paste with metallic binder should be processed within 6-8 hours

SCREEN ATM:

Any Quantity

Any Colour

Any Substrate

Any Time

Micro Inks revolutionises screen inks with its Screen Inks ATM (Any Time Matching). Get your screen inks in 15 minutes flat.

Micro Inks Limited offers INSTANT COLOUR MANAGEMENT SOLUTION to commercial printers, packaging companies and distributors by introducing Computerized Colour Matching Software.

Contact us for detail information on Technology, Infrastructure and Equipments.

Auxiliaries :

Reducer : AX-901 can be added 10 to 20 % to the ink to get desired consistency

Retarder : AX-902 can be added 10 to 20 % to the ink to get desired consistency when required to make the ink slow drying. Even a suitable combination of the Retarder with the Reducer can be used to get desired retarding effect.

Quick Dry Reducer : AX -903 can be used instead of AX - 901 for very high speed printing job

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

Accessories :

Fabric : Polyester or Nylon mesh of 100-140T are suitable. Even 77-90T can be used depending upon the type of job and the substrate to be printed to achieve desired opacity or print effect.

Stencil : All solvent resistant stencils can be used

Squeegee : Generally 65-75 durometer sharp edge squeezees 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.

