

Technical Information

Screen Inks | Packaging Printing



FLAME FREE - FL

Quick drying, Satin finish, Opaque

Substrates

Untreated polypropylene and pre-treated polypropylene, polyethylene

Application

FLAME FREE - FL is a range of specialized screen inks that gives excellent adhesion on untreated polypropylene and pre-treated polypropylene and polyethylene sheets, injection molded containers and articles.

The common applications of these inks are for printing battery cases, injection syringes, electronic components, packaging, domestic appliances, etc

Characteristics

- Quick drying, satin finish
- Resistance to battery acid, bleaching agents, alkalies, & lubricants
- Excellent adhesion

Drying

The print becomes surface dry in 5 to 8 min. and hard dry in 30 - 45 min. at a temperature of 25° C making them suitable for stacking. It takes about 1 to 2 min. to become tack-free dry when passed through a tunnel oven at 50 to 70° C. Adhesion and other product performance tests can be carried out after 24 hours

Range

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

Spot Colours

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

Process Colours

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

By adding Clear Base FL - 191, 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
Silver	SH - 804
Metallic Clear Base	FL - 191

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

Coverage

55 to 65 sq.meters. when printed with 120mesh/cm. and 15% dilution with Reducer or Retarder

Auxiliaries

Rheology Improver : SRIFF - 0921 can be added 10 to 20 % to the ink to get a desired consistency.

Rheology Slow Improver : SRIFF - 0922 can be added 10 to 20 % to the ink to get a 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 a desired retarding effect.

Accessories

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

Stencils - All solvent resistant stencils can be used

Squeegee - Generally, 65 - 75 durometer sharp edge squeezes are suitable

Shelf Life

At least 12 months when stored under the correct condition (Protected against heat and light at 30°C)

Note - Material Safety Data Sheet is available on request

Note - 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