

# Graphic Screen Inks

Outdoor Signage,  
Decals (Long Term)

## POLYPLAST IN EL

Extra Light Resistant Outdoor Screen Inks for  
Wide Range of Plastics

### Features

- Solvent Based
- Extended Outdoor Durability
- High Gloss
- Excellent Screen Stability & Self Solvency
- Suitable for Machine & Manual Printing
- Good Flexibility
- Suitable for Vacuum Forming
- Good Resistance to a Wide Range of Solvents
- Unlimited Colour Matching Capability
- Capability of Matching Metallics

### Substrate

Wide range of plastics such as:  
PVC, CAB, ABS, PC, Acrylics & Coated Polyester

TEST INKS ON SUBSTRATES  
BEFORE PRODUCTION RUN

**SERICOL**  
More than ink...Solutions.  
FUJIFILM

## Thinning

Maximum of 20% by weight of ink used. Various options for thinning are available. Please refer to section on 'Solvents'.

## Mesh

Print the Polyplast IN EL inks & metallics through 90/cm, or coarser, monofilament polyester fabric, depending on the application.

For fine details, use amber or yellow coloured fabric.

## Stencils

Stencils can best be prepared with Sericol's stencil making products:

- Xtend Prep 101: for abrasion of screen
- Xtend Prep 102: for degreasing of screen

Emulsions: Dirasol 132 single pack or Dirasol 915 two-pack.

## Drying

Air dry: up to 15 minutes. Do not stack prints immediately. Allow sufficient time for through cure.

Jet dry: 55 to 65 degree centigrade, for up to 20 seconds. Prints must be cooled to ambient temperature before stacking.

## Coverage

Polyplast IN EL inks should give coverage of 45 sq.m./kg, when printed through a 90/cm mesh.

## Wash Up

Wash up screens with SS639 Universal Screen Wash. This will ensure long life of stencils made with Dirasol emulsions.

## Outdoor Use

Polyplast IN EL inks have been successfully tested for weathering in a QUV Weatherometer, as per ASTM G53 test specification, using UVB-313 lamps. All inks withstood 3000 hours and more without appreciable colour change. Metallics withstood 2000 hours.

Accelerated weathering tests cannot be precisely related to outdoor performance. However, the Polyplast IN EL Inks overprinted with PY 433 expected to have an outdoor exposure durability of five years. Metallics and Colour matches containing any proportion of metallics would have lower outdoor durability.

For optimum weatherability, it is necessary to overprint all IN EL prints with PY433.

## Pre-Production Test

End-user must determine suitability of this product for the intended use prior to production.

Always test for adhesion and other properties before each production run because there can often be significant differences between substrates from different manufacturers and even between different batches.

## Storage

- Keep inks in a cool place, away from direct sunlight.
- Keep lids tightly closed when not in use.
- Any unused ink should not be returned to the can; must be stored separately.
- Shelf life is two to three years from the date of manufacture.
- Stir well before every use.

## Applications

The Polyplast IN EL inks are widely used for outdoor signage, POP display, decal & vacuum forming.

## Product resistance

Polyplast inks have good resistance to a wide variety of solvents including petrol and alcohol. Where exceptionally high resistance to petrol is required, overprinting with VA401 APR Varnish is recommended.

APR varnish should not be used for prolonged outdoor exposure in excess of two years in temperate climate.

The Polyplast IN EL Ink System is battery acid resistant.

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## Colour Range

The Polyplast IN EL Ink System consists of five special EL Seritone base colours that are designed for use in colour matching in conjunction with four standard IN Seritone base colours and IN-010 Tinting Black and IN-030 Tinting White.

Where Black or White printing colour is required, the standard IN-001 and IN-021 should be used as these have higher opacity and colour strength than the tinting shades.

Also available are IN-383 Extender Base, which is recommended for mixing into colour matches, and four metallics.

## Special Recommendations

To obtain the best results from the IN EL System, the following recommendations must be followed during colour matching and print production.

1. The 13 colours which comprise the EL System and IN-383 Extender may be:
  - a) Printed over and under each other .
  - b) Intermixed for matching purposes provided that:
    - i) the combined proportion by weight of IN-021 White, IN-030 Tinting White and IN-383 Extender Base does not exceed 80% of the total colour match mix.
    - ii) the individual proportion of any one colour, except Black, is not below 5% of the total mix.
2. Universal Tinters must not be added to EL System colours or to IN-383.
3. No colour, other than the EL System, must be added.
4. The EL System must be printed on to suitably durable and compatible substrates.
5. Because of different pigmentation, the five EL Seritone colours may vary in shade from the same named colours in the standard Polyplast IN range.

## Standard Colours

IN-001	Black
IN-010	Tinting Black
IN-021	White
IN-030	Tinting White
IN-841	EL Light Yellow (GS)
IN-843	EL Mid Chrome (RS)
IN-802	EL Deep Orange
IN-127	Deep Violet
IN-864	EL Red (BS)
IN-165	Magenta
IN-821	EL Vermilion / Red (YS)
IN-230	Blue
IN-325	Green
IN-383	Extender Base

## Metallic

IN-461	Rich Pale Gold
IN-462	Silver
IN-463	Bright Silver
IN-464	Sparkle Silver

## Colour Matches

Colour matches can be supplied against prints and / or wet ink.

## Solvents

SS-557	Reducer
SS-558	Slow Reducer (Retarder)
SS-639	Universal Screen Wash

The slow reducer will increase the drying time of print, whilst the reducer will not change the normal drying time of print.

## Safety and Handling

Polyplast IN EL Ink System:

- is formulated to be free from any (toxic) carcinogenic, mutagenic or reprotoxic chemicals.
- is formulated free from lead and other heavy metals and are tested as per EN71-3:1988 Toy Safety Standard.

Comprehensive information on the safety and handling of Polyplast IN EL screen inks and solvents is given in the Material Safety Data Sheet, which is available on request.

## Environmental Information

Polyplast IN EL Ink System does not contain ozone-depleting chemicals as described in the Montreal Convention.

*The information and recommendations contained in this Product Information sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Product Information sheet out of date and users are requested to ensure that they follow current recommendations*

