

# Plastical PC

## Screen Inks

**SERICOL**

*Product*

*Information*

Plastical PC is a system of inks and overprint varnish designed for outdoor applications on a wide range of vinyls and some rigid plastics.

### Main Characteristics

Finish	Drying	Thinning & Wash-up	Mesh	Stencil Type	Coverage & Mesh No.	Applications	Colour Range
High Gloss	14 - 22 metres per minute through 140.34 PW mesh with one 80 watt/cm <sup>2</sup> lamp for curing	<b>Thinning</b> 3-5% Plastical Thinner PC-TH  <b>Wash up</b> CPS Screen Wash A5 or Wash up No.1	140.34 - 165.34 PW monofilament	Any UV resistant stencil.  <b>Sericol Emulsion:</b> Dirasol 915 Dirasol 916  Indirect or 18/25 Micron Capillary Film	80 - 95 m <sup>2</sup> /L through 140.34 PW mesh	Self adhesive & rigid PVC, polycarbonate, polyester, styrene, static cling vinyls & PVC banners  ** Banners pre-wiped with methylated spirits to remove plasticiser.	25 lead-free, fade-resistant shades including Seritone Pantone Matching System, Intense & Standard process colours.

### Properties

High gloss. Fast cure speeds. Wide adhesion range. Excellent high speed printability. Good opacity and die-cutting properties. NVP free.

**IMPORTANT: Stir well before every use.**

### Plastics

Certain plastics may be impregnated with lubricants which, similar to the migration of plasticisers, may impair adhesion and block resistance - even after considerable time post printing. This can usually be overcome by wiping the surface with white spirit before printing. Surface adhesive left from protective papers on PVC sheets should be thoroughly removed as per suppliers' instructions.

**Certain plastics can become brittle when printed, sometimes even to the point of shattering, often only after several weeks. It is therefore essential to check compatibility between ink and plastic to guard against this problem. (see also recommendation for process colour printing)**

### Outdoor Use

To achieve maximum outdoor durability Plastical PC colours must be overprinted with PC-OP Overprint Clear. Only recommended reducers must be used, at recommended percentages. Only recommended mesh counts may be used. Prints must be over varnished with PC-OP Overprint Clear. Only highly durable, self adhesive PVC substrates may be used.

### Accelerated Weathering:

Tests have been conducted on prints produced using Plastical PC colours which indicate that provided application recommendations are followed, a life of up to 3-4 years can be expected (not including metallic shades, PC164 and PC114).

### Metallics:

Metallic shades or shades containing a proportion of metallic colours must be over varnished with PC-OP Overprint Clear or significant deterioration will occur.

### Pantone

The Plastical PC Seritone colour system includes a Pantone™ approved matching database. Pantone colours may be easily and quickly mixed using formulae from the Plastical PC Pantone Formula Book, the Sericol Colour Manager software and using Sericol Pantone Scales. Further details are available in the Sericol Pantone Mixing System Manual.

### Seritone Standard Colour Range

The Plastical PC range consists of 9 Seritone Base Colours Shading Black, Tinting White and PC-MX Mixing Clear.

PC-064	Seritone Yellow GS
PC-066	Seritone Yellow RS
PC-114	Seritone Orange
PC-121	Seritone Red YS
PC-164	Seritone Red BS
PC-165	Seritone Magenta
PC-127	Seritone Violet
PC-230	Seritone Blue
PC-325	Seritone Green
PC-SB	Seritone Shading Black
PC-TW	Seritone Tinting White
PC-MX	Seritone Mixing Clear

### Plastical PC additional colours:

PC-301	Opaque Black
PC-009	Dense Black
PC-026	Brilliant White
PC-802	EL Orange
PC-864	EL Mid Red
PC-OP	Overprint Clear

Where black or white printing colour is required, PC-301 Opaque Black and PC-026 Brilliant White should be used as they have higher opacity and colour strength than the Tinting shades.

PC-009 Dense Black should be used where a high density black is required, though care must be taken not to under-cure the ink.

### Guarantees:

A guarantee of the outdoor life of Plastical PC prints is available on request. To be valid, the following recommendations must be followed:

1. Only recommended reducers may be used, at recommended percentages.
2. Only recommended mesh counts may be used.
3. Prints must be over varnished with PC-OP Overprint Clear.
4. Only highly durable, self adhesive PVC substrates may be used.
5. Plastical PC colours may be: -
  - a. Printed over and under each other.
  - b. Intermixed for matching purposes provided that:
    - i. The combined proportion by weight of PC-TW Tinting White, and PC-MX Mixing Clear does not exceed 80% of the total mix.
    - ii. The individual proportion of any one colour, except black, is not below 5% of the total mix. No colour, other than the Plastical PC system must be added.
6. PC164 and PC114 should be replaced with EL colours PC864 and PC802 respectively, and shades adjusted as necessary
7. The Plastical PC system must be printed on to suitably durable and compatible substrate

### Metallic Shades

Metallic shades can be obtained by mixing PC-MX Mixing Clear with the above gold and silver powders. Recommended mixing ratios are as follows:

Gold: 850145 Multi-purpose Gold Powder  
Up to 20% by weight  
PC-MX Mixing Clear  
80% by weight

Silver: 850143 Multi-purpose Silver Powder  
Up to 10% by weight  
PC-MX Mixing Clear  
90% by weight

Also available are two metallics powders, Multi-purpose Silver Powder 850143 and Multi-purpose Gold Powder 850145.

Plastical PC metallics may be tinted if required by 5 - 10% additions of Plastical PC Seritone base colours. Plastical PC metallic shades may not be covered by the guarantee

### Four Colour Process Printing

**It should be noted that a combination of high filmweight and some hard grades of self adhesive PVC may have inadequate flexibility. In extreme cases this may cause embrittlement of the print.**

**Under these circumstances it is recommended that Hiflex EY Process Colours be used in place of Plastical PC.**

**IMPORTANT:** Intercoat adhesion between Hiflex and Plastical might be inadequate where the Plastical colour has been printed first.

It is therefore recommended that the Hiflex process colours be printed first and the Plastical colours printed subsequently. Please refer to the appropriate PI sheet for further information

### Plastical PC Process Colours

PC-004	Process Black
PC-052	Process Yellow
PC-135	Process Magenta
PC-215	Process Cyan
PC-IHK	Intense Halftone Black
PC-IHY	Intense Halftone Yellow
PC-IHR	Intense Halftone Red
PC-IHB	Intense Halftone Blue
PC-LVX	Low Viscosity Extender Base

### Thinners

PC-TH	Plastical Thinner
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### Safety and Handling

The Plastical PC system:

- Is formulated to be free from any known or suspected toxic, carcinogenic, mutagenic or reprotoxic chemicals.
- Is formulated free from lead and other heavy metals

Comprehensive information on the safety and handling of Plastical PC screen inks and thinners is given in the appropriate Sericol Material Safety Data Sheet (MSDS), which is available from the Sericol Product Catalogue CD or upon request.

### Environmental Information

The Plastical PC system:

- Is free from heavy metals
- 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 our 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 fully meet 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.

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

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