



Plastijet XG Screen Inks for Plastics

Plastijet XG is designed for high speed printing of self-adhesive vinyls, rigid PVC and polystyrenes.

Plastics

Plastics may be impregnated with lubricants that, like plasticiser migration, may impair adhesion and block resistance even a considerable period after printing. This can be overcome by wiping the surface with white spirit before printing. Surface adhesive left from protective papers on rigid PVC and acrylic sheets should be thoroughly removed in line with suppliers' instructions.

Certain plastics can become brittle when printed, possibly to the point of shattering, often only after several weeks.

It is therefore essential to check compatibility between ink and plastic to guard against problems.

Double-sided Stickers

Plastijet XG is not always suitable for the production of double-sided stickers. Prior to such use please consult your Sericol supplier. Owing to the complex nature of this type of work, printers must satisfy themselves, before starting a production run, that the substrate and production method are compatible with the ink.

Outdoor Use

Accelerated weathering tests have been carried out on prints produced using Plastijet XG and Trichromatic Plastijet TG/TL in a Marr Weatherometer set on the BS 3900 F3 Cycle. Under these conditions, the inks, with the exception of the following, withstood 2,000 hours (comparable to approx. 24 months outdoor exposure in the UK or similar climate) of testing before significant colour deterioration was evident.

XG043	Mid Chrome
XG102	Deep Orange
XG113	Mandarin Orange
XG124	Deep Red
XG164	Seritone Red (BS)

For optimum outdoor performance, particularly gloss retention, prints should be overprinted with XG383 Varnish.

The colours listed above which did not withstand 2,000 hours are not recommended for outdoor exposure greater than 12 months.

Seritone Matching System

The Seritone Matching System enables printers to readily match a wide variety of special shades.

Each of the Seritone matching colours has been carefully selected for cleanliness of tone, light and weather resistance and suitability for intermixing. Pigmentation and colour strength are high and with the additional use of Black, White and Varnish, almost any colour can be produced. For optimum colour matching performance the Seritone base colours should be used in conjunction with XG010 Tinting Black and XG030 Tinting White which are pigmented to achieve ideal colour matching. The Seritone bases can be used as printing colours, but because of their required cleanliness of tone these colours, though strong, are in some cases relatively transparent.

For this reason, Light Yellow, Mid Chrome, Deep Orange, Magenta, Monastral Blue and Monastral Green have been included in the range to give a more opaque print than the similar Seritone shade. Where a black or white printing colour is required the standard 021 White, 025 Opaque White or 001 Black should be used as these inks have higher opacity and colour strength than the tinting shades.

Main Characteristics

Finish

High Gloss

Drying

Jet drying: 60°C, 12-15 secs. Overprints may require longer.
Air drying: 5-15 mins.

Thinning

15-20% ZV551 for manual printing. 20-30% ZV551 for machine printing.

High speed printing use ZV556.

Hot shop conditions use ZV553.

Wash-up

ZV551, Seriwash Universal screen wash or Actisol Superjet Screen Spray.

Mesh

Nos. 100-120 monofilament.

Stencil Type

Any type except solvent adhering film & Stenplex Amber.

Recommended:

Dirasol 902, Dirasol 916 or 25 micron capillary film.

Coverage & Mesh No.

75-95m²/kg/120.

Applications

Self-adhesive & rigid vinyls, polystyrene, most papers & boards.

Colour Range

33 lead-free colours including Seritone System and Metallics. PANTONE®* 1000 Matching Formulae available.

Properties

Fast, safe drying. Excellent screen stability. Freedom from static. Low odour, superb printability and definition.

Co-use with other Inks

May be mixed with Polyplast PY or MattPlast MG inks, but when mixed with Matt Vinyl MV only a few days shelf life may be expected. Compatibility should always be checked by mixing a small quantity prior to mixing for the production run. Plastijet inks may be printed over Polyplast PY, MattPlast MG and Matt Vinyl MV, but should only be overprinted by Polyplast PY. Additions of Plastijet to Polyplast PY will reduce gloss level below that of either individual ink.

Plastijet XG inks dry to a high gloss finish which may be adjusted, if required, by the addition of XG Matting Base. Additions of 5-10% XG384 Matting Base will reduce the finish to semi-gloss.

IMPORTANT

Stir well before every use. Always test application fully before beginning production run as there is often considerable variance in plastics from different manufacturers and even between different batches.

*PANTONE® is the property of Pantone, Inc.

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The use of Universal Tinters is not recommended with Plastijet inks as adhesion may be impaired on some stocks.

Trichromatic Plastijet TL and TG

Plastijet TL is a thixotropic ink for high definition printing which dries to a smooth satin finish. Trichromatic Plastijet TG has a free flowing structure, drying to a scuff resistant gloss finish.

Trichromatic Plastijet is designed for ultra-fast, cool jet air drying. It has outstanding screen stability and self-solvency ensuring no loss of fine detail during printing and rapid, complete recovery of lost detail after production breaks.

Trichromatic Plastijet has been designed to give optimum printing performance. As the formulation differs from that of Plastijet XG, the adhesion characteristics of the trichromatics are not identical. For this reason printers must ensure compatibility of inks with the particular substrate to be printed prior to a production run. Plastijet TL and TG inks are available to DIN 16538/9 and have extra strong pigmentation to suit fine meshes and give optimum flexibility in colour values when used with their respective Trichromatic Extender Base. Suitable for high speed, manual or semi-automatic production.

Colour Management

The Plastijet XG range includes 9 Seritone base colours plus Black, White and Extender Base to produce accurate simulations of the PANTONE® colours in the coated ('C' suffixed) section. See section 'Outdoor Use' for important information concerning resistance properties of colour matches.

The Sericol package includes:

- PANTONE® Colour Formula Guide**
The original PANTONE® book customised by Sericol.
- Sericol Formula Guide**
A booklet containing formulations given in percentages by weight.
- Colour Manager Software**
For use with IBM compatible computers. This package enables use of the PANTONE® formulations.
 - Storage facility for user's own formulations.
 - Automatic batch sizing and costing.
 - Stock control system to calculate the amount of stock and a reminder when stocks fall below a chosen (programmable) level.
- Sericol also offers a range of weighing scales and ink dispensers pre programmed with formula to simulate PANTONE® 1000 colours. Contact your nearest representative for details on our colour management programme.

Colour Range

Plastijet XG inks are available in 31 intermixable, light-fast, lead-free colours. In order to maximise tint strength, the Seritone colours have extra high pigmentation. As a result of this, less than perfect rub resistance can sometimes be observed on certain plastics, particularly with XG121, XG230 and XG325. If found to be inadequate, over varnishing with XG383 Plastijet XG Varnish will provide a superior result. Two metallic shades are available, Decorating Silver and Non-tarnishing Gold.

Note:

Metallic inks do not lend themselves to overprinting with other colours where strong intercoat adhesion is required. For this reason metallics should be printed last. Where it is essential to overprint with other colours, Metallics should be diluted with XG 383 Extender Base. The strength of intercoat adhesion will proportionately improve as the content of metallic powder declines. A compromise between satisfactory overprinting and acceptable brilliance and opacity has been reached.

Non-tarnishing Gold has an outdoor life of twelve months in temperate climates.

Standard Colours

Plastijet XG:

XG001	Black
XG010	Tinting Black
XG021	White
XG030	Tinting White
XG025	Opaque White
XG041	Light Yellow
XG064 (P)	Seritone Yellow (Green Shade)
XG042	Light Chrome
XG043	Mid Chrome
XG066 (P)	Seritone Yellow (Red Shade)
XG113	Mandarin Orange
XG102	Deep Orange
XG114 (P)	Seritone Orange
XG121 (P)	Vermilion/Seritone Red (Yellow Shade)
XG122	Scarlet
XG164 (P)	Seritone Red (Blue Shade)
XG124	Deep Red
XG165 (P)	Seritone Magenta
XG126	Magenta
XG127 (P)	Deep Violet/Seritone Violet
XG203	Mid Blue
XG204	Royal Blue
XG225	Ultramarine
XG230 (P)	Seritone Blue
XG205	Monastral Blue
XG236	Reflex Blue
XG206	Deep Blue
XG281	Brilliant Green
XG283	Bright Green
XG325 (P)	Seritone Green
XG284	Monastral Green
XG461	Non-tarnishing Gold
XG462	Decorating Silver
XG384	XG Matting Base
XG383	Plastijet XG Varnish

(P) = Seritone Base Colours for colour matching and simulation of PANTONE® 1000

Available in 5 and 1 kg containers.

Trichromatic Plastijet TL

To DIN 16538/9

TL052	Yellow
TL135	Magenta
TL215	Cyan
TL004	Black
TL396	Extender Base

Available in 5 and 1 ltr containers.

Trichromatic Plastijet TG

To DIN 16538/9

TG052	Yellow
TG135	Magenta
TG215	Cyan
TG004	Black
TG396	Extender Base

Available in 5 ltr containers.

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Solvents

ZV551	Thinner and Cleaner
ZV552	Low Odour Thinner
ZV553	Retarder

Available in 15, 5 and 1 ltr containers.

ZV561	Vinyl Gel Retarder
ZV660	Adhesion & Surface Hardness Promoter

Available in 5 and 1 ltr containers.

ZV556	Fast Thinner
ZV644	Polystyrene Thinner

Available in 5 ltr containers.

Special Matches

Colours can be supplied against prints, wet ink samples or to PANTONE references, British Standard, 'HKS', 'Munsell' and 'Seritone' numbers. A sample of the substrate to be printed with the number and type of mesh to be used as well as other relevant data should be attached to orders.

Minimum quantity 5 kg.

Safety and Handling

Plastijet XG:

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

Comprehensive information on the safety and handling of Plastijet XG screen inks and solvents is given in the appropriate Sericol Safety Data Sheet, available upon request.

Environmental Information

Plastijet XG:

- 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 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.

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More than ink...Solutions.



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