## **Product Information**



# 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 Fujifilm 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 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.

XG164 Seritone Red (BS)

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

XG164 Seritone Red did not withstand 2,000 hours and is 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, Mid Chrome, Magenta 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.

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

## **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, Screen Wash Universal 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.

75-95m<sup>2</sup>/kg/120.

### **Applications**

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

## **Colour Range**

17 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.

## Plastijet XG Screen Inks for Plastics

## **Trichromatic Plastijet TL**

Plastijet TL is a thixotropic ink for high definition printing which dries to a smooth satin finish. 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.

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 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 Fujifilm package includes:

### 1. PANTONE® Colour Formula Guide

The original PANTONE® book customised by Fujifilm.

### 2. Fujifilm Formula Guide

A booklet containing formulations given in percentages by weight.

### 3. 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.
- 4. Fujifilm 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 15 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 Nontarnishing 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                          |  |  |
| XG064         | (P) | Seritone Yellow (Green Shade)         |  |  |
| XG066         | (P) | Seritone Yellow (Red Shade)           |  |  |
| XG114         | (P) | Seritone Orange                       |  |  |
| XG121         | (P) | Vermilion/Seritone Red (Yellow Shade) |  |  |
| XG122         |     | Scarlet                               |  |  |
| XG164         | (P) | Seritone Red (Blue Shade)             |  |  |
| XG165         | (P) | Seritone Magenta                      |  |  |
| XG127         | (P) | Deep Violet/Seritone Violet           |  |  |
| XG230         | (P) | Seritone Blue                         |  |  |
| XG325         | (P) | Seritone 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 5kg containers.

## **Trichromatic Plastijet TL**

To DIN 16538/9

| TL052 | Yellow        |
|-------|---------------|
| TL135 | Magenta       |
| TL215 | Cyan          |
| TL004 | Black         |
| TL396 | Extender Base |

Available in 5ltr containers.

## **Solvents**

| ZV551 | Thinner and Cleaner |
|-------|---------------------|
| ZV552 | Low Odour Thinner   |
| ZV553 | Retarder            |

ZV561 Vinyl Gel Retarder

ZV560 Adhesion & Surface Hardness Promoter

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.

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## **Fujifilm Speciality Ink Systems Ltd**

- Has certification to the International Environmental Standard ISO 14001.
- Is committed to minimising the risk to users of our products and also to minimising the impact of our activities on the environment, from formulation through to production and supply.
- Research & Development team, work to an in house Health, Safety and Environmental policy, termed 'Design for Health, Safety and Environment', with the aim of proactively developing products with the least impact on health, safety and the environment.
- Regularly review and monitor our impacts and activities, setting objectives and targets as part of a continual improvement process.
- Is committed to reducing waste through better use of raw materials, energy, water, re-use and recycling.

## Safety and Handling

Plastijet XG:

- Is formulated to be free from any chemicals toxic to health, carcinogenic, mutagenic or reprotoxic according to Directive 67/548/EC.
- Is formulated free from lead and other heavy metals and is tested to comply with the EN71-3: 1995 Toy Safety Standard.
- For optimum shelf life, all products should be stored at moderate temperatures, between 5°C and 30°C. Storage outside of these temperatures may lead to deterioration in the performance of the product.

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

## **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 Fujifilm Speciality Ink Systems Limited and its associated companies, 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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