Product Information



MattPlast MG/MH Screen Inks

MattPlast MG is a highly opaque ink with exceptionally low odour and excellent printability, designed for use on PVC and other plastics. A set of long life trichromatics is also available.

Plastics

Some plastics may be impregnated with lubricants which, like plasticiser migration, may impair adhesion and block resistance even a considerable period after printing. This can usually 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 supplier's instructions. **Some 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 all these problems.

Double-sided Stickers

MattPlast MG/MH inks may be used to produce 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 their substrate and production method are compatible with the ink. MG500 Obliterating Grey is recommended as the barrier coat between the first and the second side.

Vacuum Forming

MattPlast inks are suitable for vacuum forming on PVC, Polystyrene, ABS and certain grades of CAB and Cellulose Acetate. MattPlast MG should be chosen whenever a matt finish is preferred.

High Frequency Welding

MattPlast MG metallics and MG009 Dense Black are not suitable for High Frequency (HF) Welding.

The other colours may be used for HF Welding. However, owing to variations in the process, it is essential that suitability of ink and substrate for welding is tested prior to use, particularly if MG001 Black or MG010 Tinting Black are used.

Outdoor Use - MattPlast MG Line Colours

Accelerated weathering tests have been carried out in a Marr Weatherometer, set on the BS 3900 F3 Cycle, on prints produced using MattPlast MG .

Under these conditions, the inks with the exception of,

MG164 Seritone Red (BS), MG190 LF Deep Orange/Seritone Orange, withstood 2,000 hours of testing before significant colour deterioration was evident.

2,000 hours equates to approx. 24 months outdoor exposure in the UK or a similar climate.

Like all matt inks, MattPlast will tend to trap atmospheric dirt on its surface. To avoid this, over-varnish with PY433 Polyplast PY EL Overprint Varnish (See Information Sheet 'Polyplast PY EL System').**

MG164 and MG190 are not recommended for outdoor exposure greater than 12 months.

Rich Pale Gold, Metallic Bronze and Copper are not recommended for outdoor use as these Metallic shades are known to tarnish.

Main Characteristics

Finish

Matt

Drying

Jet drying: 50°C, 12-16 secs. Air drying: flexible PVC 4-7 mins., rigid PVC up to 10 mins.

Thinning & Wash-up

10-15% with ZC521. Slow production or very fine detail in hot conditions use ZC533. High production speeds use ZV556. Wash up with Screen Wash Universal, ZC533 or Actisol Superjet Screen Spray.

Mesh

90-120 monofilament Fluorescents, Metallics and Varnishes.

Stencil Type

Any type except solvent adhering film & Stenplex Amber. **Recommend:** Indirect or 25 Micron Capillary Film Sericol: Dirasol 916

Coverage & Mesh No.

32-35m2/kg No.90

Applications

Self-adhesive stickers and labels (including under surface printing), Self Cling, top coated polyester, acrylics, ABS, CAB.

Colour Range

Seritone Matching System and metallics. PANTONE®*1000 Matching Formulae available.

Properties

Exceptionally low odour of wet ink and finished print. Fast, jet drying to smooth finish with high opacity. Excellent screen stability and print definition. EN71 Approved Colours.

Co-Use With Other Inks

MattPlast may be mixed with Matt Vinyl MV. Mixtures should be thinned with ZV542. MattPlast may also be mixed with Plastijet XG, Plastipure Fluorescent FP, Polyplast PY, Seritec TH. Such mixtures should be thinned with ZV551.

MattPlast will print over dry ink films of Matt Vinyl MV, Seritec TH and may also be overprinted by them and Plastipure FP. Where maximum interface adhesion between colours is required, a single ink system should be used.

IMPORTANT:

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

MattPlast MG/MH

Outdoor Use - Trichromatic MattPlast MH

Trichromatic MattPlast MH inks have exceptional weathering resistance when over-varnished with PY433 EL Overprint Varnish.

Actual outdoor exposure tests have been carried out in the UK climate in accordance with BS 3900 Part F6 on varnished prints. These tests indicate that vertically mounted, top surface prints on a suitable long life substrate, which have been over-varnished with PY433 EL Overprint Varnish, should not change colour significantly in a period of less than 5 years in such a climate.

In view of the ink's matt finish, long life exposure without varnish is not recommended, as the prints will pick up atmospheric dirt. In view of the more limited weathering performance of the MattPlast MG line colours (see section 'Outdoor Use - MattPlast MG Line Colours'), these are not recommended for extended outdoor exposure. Where a long life line ink is required for use with Trichromatic MattPlast MH, Polyplast PY EL colours, over-varnished with PY433 EL Overprint Varnish should be used (see Product Information Sheet 'Polyplast PY EL System'). Available at the Fujifilm Sericol website **

Outdoor use - Written Guarantees:

Guarantee of the outdoor life of Trichromatic MattPlast MH, overvarnished with PY433 EL Overprint Varnish and exposed in the UK or a temperate climate, is available on request from Sericol. For that guarantee to be valid, it must be obtained in writing prior to first use. Specific enquiries regarding outdoor durability in non-temperate climates should be made via your Sericol supplier. For further information see the 'Weathering 'Hints & Tips sheet available at the Fujifilm Sericol website **

Trichromatic MattPlast MH -Special Recommendations

To obtain maximum weathering resistance properties from Trichromatic MattPlast MH, the following recommendations must be observed.

- Substrate must be top surface printed (not under surface) and varnished with PY433 EL Overprint Varnish.
- Maximum of 25% Extender Base to be added to any colour.
- No other ink or varnish to be added.
- · Finished prints to be mounted vertically.
- Universal Tinters must not be added to any ink or varnish.

Inks	Trichromatic MH052 MH135 MH215 MH004 MH396	MattPlast MH Trichromatic Yellow Trichromatic Magenta Trichromatic Cyan Trichromatic Black Trichromatic Extender Base
Thinning	Maximum 25 ZC521 ZC533 ZV556	Thinner Retarder Fast Thinner
Overprint Varnish	Polyplast PY433 EL Overprint Varnish:	
Thinning	Maximum 25 ZV557 ZV558 ZV556	5% Thinner Retarder Fast Thinner
Substrate	Long life PVC, eg. cast vinyl film	
Mesh	120T monofilament or coarser	

MattPlast MG Metallics

Rich Pale Gold and Silver metallics are available in MattPlast MG. Additional metallic Bronze, Copper and Rich Gold powders are available, which may be mixed into MG382 Metallic Ink Medium. When mixing, a ratio of 80 parts varnish to 20 parts powder by weight will give a bright metallic effect. For further information on metallic powders and pastes see Product Information Sheet 'Universal Tinters, Varnishes and Metallic Powders'.**

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 intermixed with MG382 Metallic Ink Medium. 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 to be reached.

The Seritone Matching System

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

The Seritone base colours have been specially selected for their cleanliness, colour strength and suitability for intermixing. Using the Seritone base colours plus Black, White and Extender Base, almost any colour can be produced. For optimum colour matching performance, it is recommended that the Seritone base colours should be used in conjunction with MG010 Tinting Black and MG030 Tinting White which are pigmented to achieve ideal colour matching.

Where a black or white printing colour is required, MG021 White, MG023 Extra Opaque White, MG001 Black or MG009 Dense Black should be used, as these have higher opacity and colour strength than the tinting shades.

Standard Colours

MattPlast	MG:	

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MG010Tinting BlackMG010Tinting BlackMG021WhiteMG023Extra Opaque WhiteMG030Tinting WhiteMG041(s)Light Yellow/Seritone Yellow GSMG080LF Mid Chrome/Seritone Yellow RMG190LF Deep Orange/Seritone OrangeMG191LF Vermilion/Seritone Red YSMG162LF ScarletMG163(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG230(s)Seritone Blue RSMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG001		Black	
MG021WhiteMG023Extra Opaque WhiteMG030Tinting WhiteMG041(s)Light Yellow/Seritone Yellow GSMG080LF Mid Chrome/Seritone Yellow RMG190LF Deep Orange/Seritone OrangeMG191LF Vermilion/Seritone Red YSMG192LF ScarletMG164(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG230(s)Seritone Blue RSMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(s)=Seritone Shade	MG009		Dense Black	
MG023Extra Opaque WhiteMG030Tinting WhiteMG041(s)Light Yellow/Seritone Yellow GSMG080LF Mid Chrome/Seritone Yellow RMG190LF Deep Orange/Seritone OrangeMG191LF Vermilion/Seritone Red YSMG192LF ScarletMG164(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours	MG010		Tinting Black	
MG030Tinting WhiteMG041(s)Light Yellow/Seritone Yellow GSMG080LF Mid Chrome/Seritone Yellow RMG190LF Deep Orange/Seritone OrangeMG191LF Vermilion/Seritone Red YSMG192LF ScarletMG164(s)Seritone Red BSMG155(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG021		White	
MG041(s)Light Yellow/Seritone Yellow GSMG080LF Mid Chrome/Seritone Yellow RMG190LF Deep Orange/Seritone OrangeMG191LF Vermilion/Seritone Red YSMG192LF ScarletMG164(s)Seritone Red BSMG155(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG023		Extra Opaque White	
MG080LF Mid Chrome/Seritone Yellow RMG190LF Deep Orange/Seritone OrangeMG191LF Vermilion/Seritone Red YSMG192LF ScarletMG164(s)Seritone Red BSMG165(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colorer(GS)=Green Shade(YS)=Yellow Shade	MG030		Tinting White	
MG190LF Deep Orange/Seritone OrangeMG191LF Vermilion/Seritone Red YSMG192LF ScarletMG164(s)Seritone Red BSMG165(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG041	(s)	Light Yellow/Seritone Yellow GS	
MG191LF Vermilion/Seritone Red YSMG192LF ScarletMG164(s)Seritone Red BSMG165(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG080		LF Mid Chrome/Seritone Yellow RS	
MG192LF ScarletMG164(s)Seritone Red BSMG165(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG230(s)Seritone BlueMG205Monastral BlueMG283Bright GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colurs(GS)=Green Shade(YS)=Yellow Shade	MG190		LF Deep Orange/Seritone Orange	
MG164(s)Seritone Red BSMG165(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG230(s)Seritone BlueMG205Monastral BlueMG206Deep BlueMG325(s)Seritone GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG191		LF Vermilion/Seritone Red YS	
MG165(s)Seritone MagentaMG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG230(s)Seritone BlueMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG192		LF Scarlet	
MG127(s)Deep Violet/Seritone VioletMG203Mid BlueMG233(s)Seritone Blue RSMG230(s)Seritone BlueMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colurs(GS)=Green Shade(YS)=Yellow Shade	MG164	(s)	Seritone Red BS	
MG203Mid BlueMG233(s)Seritone Blue RSMG230(s)Seritone BlueMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG165	(s)	Seritone Magenta	
MG233(s)Seritone Blue RSMG230(s)Seritone BlueMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG127	(s)	Deep Violet/Seritone Violet	
MG230(s)Seritone BlueMG205Monastral BlueMG206Deep BlueMG283Bright GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG203		Mid Blue	
MG205Monastral BlueMG206Deep BlueMG283Bright GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG233	(s)	Seritone Blue RS	
MG206Deep BlueMG283Bright GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG230	(s)	Seritone Blue	
MG283Bright GreenMG325(s)Seritone GreenMG284Monastral GreenMG500Obliterating GreyMG381Extender Base(s)=Seritone Base Colours(GS)=Green Shade(YS)=Yellow Shade	MG205		Monastral Blue	
MG325 (s) Seritone Green MG284 Monastral Green MG500 Obliterating Grey MG381 Extender Base (s)=Seritone Base Colours (GS)=Green Shade (YS)=Yellow Shade	MG206		Deep Blue	
MG284 Monastral Green MG500 Obliterating Grey MG381 Extender Base (s)=Seritone Base Colours (GS)=Green Shade (YS)=Yellow Shade	MG283		Bright Green	
MG500 Obliterating Grey MG381 Extender Base (s)=Seritone Base Colours (GS)=Green Shade (YS)=Yellow Shade	MG325	(s)	Seritone Green	
MG381 Extender Base (s)=Seritone Base Colours (GS)=Green Shade (YS)=Yellow Shade	MG284		Monastral Green	
(s)=Seritone Base Colours (GS)=Green Shade (YS)=Yellow Shade	MG500		Obliterating Grey	
(GS)=Green Shade (YS)=Yellow Shade	MG381		Extender Base	
(YS)=Yellow Shade	(s)=Seritone Base Colours			
(BS)=Blue Shade				

The above are available in 5 kg and 1 kg containers.

MattPlast MG/MH

Fluorescents

Plastipure Fluorescent FP screen inks are recommended when a fluorescent ink is required for use in conjunction with MattPlast MG. (See Product Information Sheet, 'Plastipure Fluorescent FP').**

Metallics

MG461 Rich Pale Gold MG462 Silver MG382 Metallic Ink Medium Available in 5 kg and 1kg containers.

Trichromatic MattPlast MH

MH052Trichromatic YellowMH135Trichromatic MagentaMH215Trichromatic CyanMH004Trichromatic BlackMH396Trichromatic Extender BaseAvailable in 5 kg containers.

Solvents

ZC521	Thinner	Available in 15, 5 and 1 litre containers.
ZV556	Fast Thinner	Available in 5 litre containers.
ZC533	Retarder	Available in1 and 5 litre containers.

Universal Tinters

A range of 10 non-fluorescent and 4 fluorescent highly concentrated colour bases for tinting. The fluorescent colours are not recommended for use with MattPlast, but up to 10% of the non-fluorescent tinters may be added. See Product Information Sheet 'Universal Tinters, Varnishes and Metallic Powders'. **

Special Matches

Colours can be supplied against prints, wet ink samples or to PANTONE references, British Standard, 'HKS', 'Munsell' or '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.

Fujifilm Sericol UK 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 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

MattPlast MG/MH:

 Products are formulated free from lead and other heavy metals and tested to comply to the EN71-3:1995 Toy Safety Standard.

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

Environmental Information

MattPlast MG/MH:

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 The information and recommendations contained in this Product momation sheet, as well as technical darke otherwise given by representatives of our company, whenever verbainy or in whiting, 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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