

PLT-MD Digital Flatbed Printer Ink

Versatile UV LED-curable Digital Printing Ink for a wide range of flexible and rigid substrates

Compatible with various print heads commonly employed on UV printers

Field of Application

Substrates

The PLT-MD substrate range

includes:

Flexible substrates:

- PVC banner material
- Self-adhesive films up to 200µm
- PE/PET/PC/PVC films up to 200µm
- Printable fabrics such as Trevira®
- Artificial leather

Rigid substrates:

- Acrylics (PMMA)
- Rigid PVC and PVC foam board
- Aluminium composite panels (Dibond®)
- Pretreated PP (e.g. corrugated plastic)
- Polycarbonate, Polystyrene, ABS
- Coated metal
- Glass*
- Wood and MDF boards
- Corrugated board, cardboard & Re-Board®

*Recommendations are available upon request. According to internal tests the above mentioned substrates achieve max GT 2.

In order to achieve best ink adhesion, the surface tension of PE/PP must not be lower than 44 mN/m. Even though these substrates are usually pre-treated by the manufacturer, this effect wears off during storage time, so adhesion may be reduced. Therefore, if the surface tension is lower than 44 mN/m, we recommend another pre-treatment with suitable methods like Corona, Plasma, or flame. It is important to ensure that the substrate is free of fingerprints.

Priming can significantly improve the adhesion properties on challenging substrates like glass, or metals (coated, anodized or powder coated surfaces).

Since all the print substrates mentioned may be different in printability even within an individual type, preliminary trials are essential to determine the suitability for the intended use.

Field of use

PLT-MD is suitable for devices employing the below mentioned print heads:

- Ricoh Gen3 and Gen4
- Konica Minolta 512 and 1024
- Dimatix Q-Class
- Xaar 1001

Exemplary System Settings on UV Printers Mimaki 3042

	Printhead	Negative Pressure
CMYK	45°C	Manual
White	45°C	Manual

Characteristics

Curing

PLT-MD is a fast curing LED ink. PLT-M is a slightly post-curing ink which will achieve its best adhesion and resistance after 24 hours.

Light Fastness

The pigments contained in PLT-MD are suitable for a 2-year vertical outdoor exposure, referred to the middle European climate and suitable substrates.

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Range

Basic shades

#180	Yellow
#181	Magenta
#182	Cyan
#65	Black
#70	Clear/Varnish

Further colours

#60	White
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Auxiliaries

#FLUSH	Cleaner
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For the ink change-over, it is recommended to use **FLUSH** for all ink-carrying components of the ink system. This cleaner has been chemically adjusted to the ink.

Shelf life

The shelf life for an unopened ink container if stored in a dark room at a temperature of 15 - 25 °C is:

- 1 year for 428-489
- 6 months for 170 White

The ambient temperature may fall below this value only once for max. 2-3 days. Under different conditions, particularly other storage temperatures, the shelf life is reduced. In such cases, the warranty given by EPSVT expires.

Change-over

Before changing over to PLT-MD it is recommended to completely drain the ink system before rinsing all ink-carrying components with **FLUSH**. For further information please refer to the change-over manual.

Note

Our technical advice whether spoken, written, or through test trials corresponds to our current knowledge to inform about our products and their use. This is not meant as an assurance for certain properties of the products nor their suitability for each application.

You are, therefore, obliged to conduct your own tests with our supplied products to confirm their suitability for the desired process or purpose. The selection and testing of the ink for specific applications is exclusively your responsibility. Should, however, any liability claims arise, they shall be limited to the value of the goods delivered by us and utilised by you with respect to any and all damages not caused intentionally or by gross negligence.

Labelling

For PLT-MD and its additives and auxiliaries, there are current Material Safety Data Sheets available according to EC regulation 1907/2006, informing in detail about all relevant safety data including labelling according to the present EEC regulations as to health and safety labelling requirements. Such health and safety data may also be derived from the respective label.