

UV Matt Varnish UVLM 2

UV Structure Varnishes UVLS 1, UVLS 2



Special UV-curable Varnishes for polycarbonate, coated polyester, and PVC

Fast curing, good chemical and scratch resistance

Vers. 05
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Field of application

Substrates

Screen printing effect varnishes for polycarbonate panels or top coated polyester, as well as effect printings on PVC substrates to achieve special graphic effects.

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

Characteristics

- good chemical resistance
- good rub and abrasion resistance
- consistently even surface
- fast curing

Curing

A UV-curing unit with a medium pressure mercury lamp (80-120W/cm) and a belt speed of 15-25 m/min will cure the UV varnishes.

The curing speed of the ink is generally dependant upon the kind of UV-curing unit (reflectors), number, age, and power of the UV-lamps, the printed ink layer thickness, substrate in use, as well as belt speed of the UV-curing unit. For the UV-special varnishes the use of nitrogen UV-dryers is not necessary.

All UV-varnishes will post-cure within 24 h and will achieve best adhesion and resistance after these 24 hours. The UV varnish will withstand a cross-cut tape test after having cooled down to room temperature.

All varnishes (UVLM 2, UVLS 1 and UVLS 2) are press-ready but must be stirred homogeneously before printing.

Range

UVLM 2

- matt varnish, milky
- for fully automatic screen printing presses
- low surface sensitivity
- homogeneous ink-flow
- for offset varnishing

UVLS 1

- UV structure varnish
- pronounced structure
- transparent and non-sensitive surface

UVLS 2

- UV structure varnish
- less structure
- milky

Cleaning

For manual cleaning of screen printing stencils and tools our cleaner UR 3 (flash point 42° C) or UR4 (flash point 52°C) can be used.

Fabrics and Stencils

We recommend a mesh count between 120-31 and 150-34 threads (plain weave). A uniform screen tension is most important to receive an even finish.

All commercially available capillary films (15-20µm) or solvent resistant photo emulsions and combined stencils can be used for UV inks.

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Mileage

Mileage is about 50-60 m²/kg of printed surface dependant upon the mesh and substrate chosen.

Shelf life

Shelf life depends very much on the formula and reactivity of the ink system, as well as the storage temperature.

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 UVLM 2
- 2 years for UVLS 1 and UVLS 2

Under different conditions, particularly higher storage temperatures, the shelf life is reduced. In such cases, the warranty given by Marabu expires.

Labelling

For our special varnishes UVLM 2, UVLS 1 and UVLS 2, and the cleaners UR 3 and UR 4, there are current Material Safety Data Sheets available according to EC-regulation 1907/2006, covering in detail all relevant safety data including the 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.

Safety rules for UV screen printing inks

UV-varnishes contain some substances which may irritate the skin. Therefore, we recommend to take utmost care when working with UV-curable screen printing inks. Parts of the skin dirtied with ink are to be cleaned immediately with water and soap. Please pay also attention to the notes on labels and safety data sheets.

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 application is exclusively your responsibility.

Should, however, any liability claims arise, such claims 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.