

UV Gloss Varnishes



UVLG 1, UVLG 5, UVLG 6, UVLG 7

Vers.5
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UV - Gloss-Varnish for overprint varnishing or spot-varnishing / surface finishing

High gloss, universal, for industrial and graphical applications

Field of application

Overprint varnishing, full surface or spot varnishing of offset and screen prints onto paper, cardboard, paste board, and plastics after preliminary trials.

Attention: Some offset and screen printing inks contain levelling agents, waxes or anti-offset powder to receive a better ink drying. This may affect levelling or adhesion of the gloss varnish. Furthermore good drying of the offset ink (non bleeding of the colours) before the UV lacquer finish is vital as well as air humidity control in the printing room for good printed results. Preliminary trials are necessary. 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

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In regard to viscosity and rheology, the UV gloss varnishes are press-ready, high gloss and flexible.

All varnishes must be stirred homogeneously before printing.

Curing

A UV-curing unit with a mercury lamp (80-120 W/cm) will cure all UV varnishes.

Please consider the reactivity for the belt speed as follows:

15 - 25 m: UVLG 1

20 - 35 m: UVLG 5, UVLG 6, UVLG 7

The curing speed of the varnish 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. The varnishes will post-cure within the first 24 hours and achieve their full adhesion and mechanical resistance by then.

Stress resistance

After proper and thorough drying, the varnish exhibits outstanding adhesion as well as rub, scratch, block, and high chemical resistance to solvents, alcohol, hand perspiration, water, and usual fillings.

Range

UVLG 1

- high gloss
- very flexible
- not suitable for double sided prints
- non-yellowing
- speeds up to 1000 prints/h

UVLG 5

- varnish for offset applications
- optimized price
- high gloss
- very flexible
- fast curing, up to 3000 prints/h
- non-tacky surface, suitable for double sided prints

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UVLG 6

- high gloss, high transparency
- dirt repellent
- high chemical resistance
- fast curing, up to 3000 prints/h

UVLG 7

- for very high ink deposit
- constant ink layer
- Very good edge definition
- Very flexible and transparent
- For flat bed screen printing and roll-to-roll
- fast curing, 20 – 35 m / min

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. In the case of longer machine stops (> 30 min), it is important that the ink remaining in the screen open area is removed as otherwise it may dry in and clog the mesh.

Fabrics, stencils

UV gloss varnishes can be processed with all commercially available stencil techniques such as capillary films (15-20 µm) or solvent-resistant photo emulsions.

We recommend to use very fine mesh-sizes in order to achieve a thin ink film, a mesh count between 150 – 27 to 185-27 threads (1:1 plain weave). The varnishes can also be printed with a thicker mesh, up to 120-34 threads.

A uniform screen tension of all fabrics used is important to achieve good ink flow.

Mileage

Mileage of one kg varnish is about 70-90 m² of printed surface according to mesh and substrate chosen.

Shelf life

Shelf life depends very much on the formula/reactivity of the product 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:

- 2 years for UVLG 1, 5, 6
- 1 year for UVLG 7

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

Labelling

For our UV gloss varnishes 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 labeling requirements. Such health and safety data may also be derived from the respective label.

Safety rules

UV gloss varnishes contain some substances which may irritate the skin. Therefore, we recommend to take utmost care when working with UV-curable products.

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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.