

Special Tarpaulin ink for soft PVC tarpaulin substrates

Satin gloss, high opacity, fast drying, weather resistant, rollable, sprayable, and printable

Vers. 4
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Field of Application

Mara® Plan PL is suited for soft PVC tarpaulin materials and similar substrates.

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

Mara® Plan PL is, after the addition of thinner, a rollable or sprayable ink type for single or multi-colour decorations on soft PVC tarpaulin. Good adhesion and elasticity will be achieved if the ink film is applied properly. Thanks to these properties the ink can be applied with Moltopren rollers, brushes or by spraying. Despite its low viscosity, Mara® Plan PL is press-ready for screen printing.

Characteristics

Ink Adjustment

The ink should be stirred homogeneously before printing and if necessary during production.

To protect the ink in opened containers against excessive drying, it can be carefully covered with a layer of thinner which can then be later stirred into the ink prior to processing (rolling or spraying).

Drying

Physically fast drying; after approx. 15 – 20 min drying at 20° C ambient temperature, the next ink layer can be applied. The times mentioned above vary according to the substrate, the ink film thickness, drying conditions and the auxiliaries used. After adequate drying time, we strongly recommend to use anti-block-powder as separating agent.

Fade resistance

Pigments of good fade resistance are used for the Mara® Plan PL range. Dependant upon the mixing ratio, shades mixed with white will most likely show a reduced fade resistance and weather resistance. The pigments used are resistant to plasticizers and solvents.

Stress resistance

After proper and thorough drying, the ink film exhibits outstanding surface stability and weather resistance. During drying, please do not expose Mara® Plan PL prints to pressure (do not stack), and/or higher temperatures.

Range

Basic Shades

021	Medium Yellow
022	Yellow Orange
026	Light Yellow
033	Magenta
035	Bright Red
036	Vermilion
045	Dark Brown
055	Ultramarine Blue
058	Deep Blue
067	Grass Green
068	Brilliant Green
070	White
073	Black

High Opaque Shades

170	Opaque White
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Press-Ready Metallics

191	Silver
193	Rich Gold

All shades are intermixable. Mixing with other ink types or auxiliaries must be avoided in order to maintain the special characteristics of this ink.

All basic shades are included in our Marabu-ColorFormulator (MCF). They build the basis



for the calculation of individual colour matching formulas, as well as for shades of the common colour reference systems HKS®, PANTONE®, and RAL®. All formulas are stored in the Marabu-ColorManager software.

Auxiliaries

SA 1	Surface Additive	3-5%
PLV	Thinner	0-20%
7037	Spray Thinner	0-20%
UR 3	Cleaner (flp. 42°C)	
UR 4	Cleaner (flp. 52°C)	
UR 5	Cleaner (flp. 72°C)	
PLR	Cleaner	
ABP	Anti-Block Agent	

The addition of surface additive SA 1 can increase the resistance against abrasion and other mechanical stress (max. addition 10%).

Thinner PLV is added to the ink to adjust the viscosity to a rollable level.

For spray coating, fast Spray Thinner 7037 should be used (on parts sensitive to tension cracks, preliminary trials are essential).

The cleaners UR 3 and UR 4 are recommended for manual cleaning of the working equipment. Cleaner UR 5 is recommended for manual or automatic cleaning of the working equipment.

The substrate surface must be absolutely free of contaminating residues such as grease, oil, and finger sweat. Cleaner PLR is suited to prepare the substrate surface accordingly. Please let the cleaned surface dry completely before proceeding.

After allowing the print to dry, a thin layer of Anti Block Agent ABP can significantly reduce the risk of prints sticking together if they are stacked and/or folded.

Printing Parameters

All types of commercially available polyester and nylon fabrics and solvent-resistant stencils can be used.

Shelf Life

Shelf life depends very much on the formula/reactivity of the ink system as well as the storage temperature. It is 3.5 years for an unopened ink container if stored in a dark room at a temperature of 15-25°C. Under different conditions, particularly higher storage temperatures, the shelf life is reduced. In such cases, the warranty given by Marabu expires.

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 foregoing information is based on our experience and should not be used for specification purposes.

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 Mara® Plan PL and its 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 EC regulation 1272/2008 (CLP regulation). Such health and safety data may also be derived from the respective label.