

Screen printing system ink

Deep matt, high opaque, brilliant shades, fast drying, suitable for placarding



Marabu

Maraplak MM

For paper, card, cardboard, hardboard, chromopapers, canvas, wax

Field of application

Substrates

The screen printing ink Maraplak MM is deep matt, brilliant, highly opaque, and suitable for the following substrates:

- offset and art papers
- card, cardboard, chromopapers
- hardboard, wood
- polystyrene
- canvas
- wax candles

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

Field of use

Maraplak MM is highly suitable for the printing of high-quality screen prints and posters as well as reflexion-free interior decoration, pictures, displays etc. Further applications are printing of embroidery patterns on canvas and printing onto wax candles.

MM can also be processed with a spray gun, but preliminary trials are necessary for this process. We recommend to filter the thinned ink (25 μ m screen) before processing, as otherwise there could be bubbles in the ink film.

Characteristics

Drying

Physically fast drying, dries at 20 °C within 20 - 30 min. (for overprintability), at 50 °C in a tunnel dryer it is stackable within 60 sec.

The times given above vary according to the printed substrate, the ink film thickness, drying conditions, and the auxiliaries used.

Generally, an extended drying time is necessary when overprinting the ink.

Fade resistance

We are using pigments of excellent fade resistance for all shades of our Maraplak MM ink type, allowing a short-term outdoor use.

The pigments used are non-resistant to plasticizers and solvents.

Stress resistance

After proper and thorough drying, the ink film of Maraplak MM is suitable for placarding. Due to the matt ink finish, the basic shades are less rub-resistant than glossy screen printing ink types.

For maximum rub and abrasion resistance, especially in double-side printing in a stack, we recommend to overvarnish with printing varnish MM 902, which is less matt.

Range

Marabu-ColorManager (MCM) colour matching system includes the 14 basic shades of Maraplak MM. All shades are intermiscible. The Maraplak MM ink should not be mixed with other types of ink, to maintain the special characteristics of this outstanding ink range.

Beginning with May 1994, all colour shades, and beginning with November 1997, the bronze binder MM 902 and the transparent base MM 409, based on their chemical structure, correspond to the EEC regulations EN 71/part 3, safety of toys - migration of specific elements. All colour shades and varnishes, therefore, are suitable for printing onto toys.

Basic Shades for Mixing System 21, RAL, and HKS

As per basic colour fan System 21

MM 020	Lemon	MM 055	Ultramarine Blue
MM 021	Medium Yellow	MM 058	Deep Blue
MM 022	Yellow Orange	MM 059	Royal Blue
MM 031	Scarlet Red	MM 067	Grass Green
MM 033	Magenta	MM 068	Brilliant Green
MM 035	Bright Red	MM 070	White
MM 036	Vermilion	MM 073	Black

By using these 14 basic shades in accordance with the mixing ratios given in the Marabu-ColorManager (MCM) software, it is possible to produce shades of the popular ink systems HKS, RAL, and Marabu System 21.

Further Basic Shades:

MM 170 Opaque White

The opaque white exhibits less flexibility due to more pigments.

Additives

Transparent base:	MM 409
Bronze binder:	MM 902
Printing varnish:	MM 902
Extender:	ST 1

Bronze powders (to be mixed with MM 902)

All bronze shades are included in a separate bronze shade chart.

S 181 Aluminium	S 184 Pale Gold
S 182 Rich Pale Gold	S 186 Copper
S 183 Rich Gold	S 190 Aluminium (rub-resistant)



Due to their chemical structure, Pale Gold and Copper reduce the processing time of bronze inks. Please mix only such a quantity which will be processed within 8 hours.

Auxiliaries

Thinner:	MMV
Retarder:	SV 1
Retarder, slow:	SV 9
Cleaner:	UR 1

To adjust the print viscosity, it is generally sufficient to add 10 - 15 % thinner to the ink. To produce a retarding effect for slow printing sequences, the retarder SV 1 is added to the thinner proportionately (e.g. 50 % of the quantity).

For an ink mixture containing retarder, only thinner without retarder should be used for additional thinning during print run.

It is recommended to clean the screens with Cleaner UR 3 immediately after use.

Fabrics and stencils

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

Recommendation

The ink should be stirred well before printing.

Labelling

For our ink type Maraplak MM and its additives and auxiliaries there are current Material Safety Data Sheets according to EC-regulation 91/155, informing in detail about 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 obtained from the respective label.

The ink has a flash point between 21 °C and 100 °C. Since the ink is not considered as a flammable liquid due to its pastous nature, any specific regulations for the handling of flammable liquids do not apply for the ink.

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.