

# Product Data Sheet

## Screen Printing Ink

# MP MELAPRESS

## Solvent Based Screen Ink Range, Pressing Inks, 1-Component

### APPLICATION

Special screen printing inks for printing on special papers impregnated with synthetic resins. After printing they can be pressed with melamine or phenolic resin at high pressure and temperature. These printed parts are used for decoration of table and counter tops and also for housing parts.

### PROPERTIES

- Screen inks MP are solvent based, physically drying 1-component screen printing inks. MP inks do not contain silicone.
- MP inks result in a mat finish. They have been specially formulated to bond well with the substrate paper as well as the melamine resin paper.
- After pressing MP inks are suitable for indoor and medium-term outdoor applications.

### COLOUR SHADES - OVERVIEW

- Mixing System: C-MIX 2000 12 colour shades for mixing of RAL, PMS and HKS colours.
- Opaque: Standard Colour shades with medium to good opacity.
- Special colour shades are available upon request.
- More information about available colour shades in the detailed tables in section Colour Shades.

### CHOICE OF PIGMENTS AND LIGHT FASTNESS

Colour shades of MP ink range contain pigments with a high light fastness. Light fastness and weather resistance will reduce if thinner layers are applied or if base colours are mixed with a high ratio of white or varnish.

After pressing MP inks are suitable for indoor and medium-term outdoor applications.

### ADJUSTMENT FOR SCREEN PRINTING

- Screen printing inks MP are not supplied in a ready-to-print adjustment.
- Depending on local conditions the ink is adjusted for printing by addition of 15 to 20 % by weight thinner or retarder (stir with mixer, agitator).
- Prior to printing, the inks should be stirred well to obtain a homogeneous dispersion of all ingredients.

### THINNERS / RETARDERS

For adjustment of screen inks MP, the following products are available:

<b>Thinner:</b>	<input type="radio"/> VD 10	Very quick thinner, mild
	<input checked="" type="radio"/> <b>MP/V</b>	<b>Standard thinner</b>
	<input type="radio"/> XVH	Slow thinner, mild
<b>Retarder:</b>	<input type="radio"/> VZ 10	Quick retarder
	<input type="radio"/> VZ 20	Medium retarder
	<input type="radio"/> VZ 30	Very slow retarder
<b>■= Preferred</b>		<b>○= Suitable</b>

Depending on printing conditions, the products listed above can be mixed into the inks individually or as mixtures. Please note that depending on evaporation rate of the thinner/retarder used drying times may be longer.

Thinner/retarder should be mixed into the ink thoroughly using a mixer or agitator. In addition, inks should be stirred well prior to each processing to obtain a homogeneous dispersion of all ingredients.

**ADDITIONAL AUXILIARY AGENTS**

**Not required.**

**OVERPRINTING**

**Not required.**

**BRONZE COLOURS, MIXING OF BRONZE INKS**

**Not available.**

**DRYING**

MP screen printing inks dry physically, i.e. by evaporation of solvents.

Drying times below are only approximate as drying times depend on various factors.

- Type and amount of thinners/retarders used.
- Thickness of printed ink layer; number of overprinted ink layers.
- Rack drying or tunnel dryer.
- Temperature, air supply, speed of air stream.
- Type of substrate/material printed.

Depending on local conditions, drying time in a drying frame (rack) is approx. 30 minutes at room temperature (20°C). Drying time using an efficient tunnel dryer (e.g. 2 hot air and 1 cold air section) is about 5 minutes at a temperature of 50°C to 80°C.

**Note: Addition of retarders may result in much longer drying times!**

**SCREEN FABRIC / STENCILS**

MP inks have been formulated for printing with fabrics ranging from 77 to 120 threads/cm. Suitability for printing with coarser or finer fabrics should be determined by corresponding pre-trials.

All copy emulsions and capillary films suitable for solvent based screen inks can be used, such as our program of SunCoat or Murakami products.

**CLEANING**

Stencils and tools can be cleaned with thinner VD 10. Universal cleaning agent URS can be used if mixed with approx. 20% of VD 10.

**PACK SIZE**

Screen printing inks MP are delivered in 1 litre containers. Other pack sizes are available upon request.

**SHELF LIFE**

In closed original containers, MP inks generally have a shelf life of 5 years from date of production.

For exact date of expiry, please refer to the label.

**SAFETY DATA SHEETS**

Read safety data sheet prior to processing

Safety data sheets comply with Regulation (EC) No. 1907/2006 (REACH), Appendix II.

**CLASSIFICATION AND LABELLING**

Hazard classification and labelling comply with Regulation (EC) No. 1272/2008 (CLP/GHS).

**CONFORMITY**

Coates Screen Inks GmbH does not use any of the substances or mixtures for the production of printing inks, which are banned according to the EUPIA (European Association of the Printing Inks Industry) exclusion policy.

Further compliance confirmations are available upon request.

**ADDITIONAL INFORMATION ABOUT OUR PRODUCTS**

Product data sheets: Auxiliary Agents for Screen Printing HM

Brochures: Solvent Based Screen Printing Inks

Internet: Various technical articles are available for download on [www.coates.de](http://www.coates.de), section "SN-Online"

**FOR COLOUR RANGES, PLEASE REFER TO NEXT PAGE.**

**COLOUR SHADES**

<b>C-MIX 2000 BASE COLOUR SHADES</b>					
<b>Mixing system for matching of PMS, HKS, RAL colours (on white substrates)</b> Start formulations available in data base „Formula Management C-MIX 2000“ According to colour card <b>C-MIX 2000</b>					
primrose	MP/Y30	red	MP/R50	green	MP/G50
golden yellow	MP/Y50	magenta	MP/M50	black	MP/N50
orange	MP/O50	violet	MP/V50	white	MP/W50
scarlet	MP/R20	blue	MP/B50	varnish	MP/E50
<b>STANDARD Colour Range (medium opacity)</b>					
According to colour card <b>STANDARD 1</b> for screen printing inks Availability of further standard shades upon request					
White	MP 60	Black	MP 65		
<b>STANDARD Colour Range HD (high opacity)</b>					
According to colour card <b>STANDARD HD</b> for screen printing inks Availability of further standard HD shades upon request					
white, highly opaque	MP 60/HD				
<b>SPECIAL PRODUCTS: Special Colour Shades, Varnishes, Pastes</b>					
Information about availability upon request					
Bronze binder	MP/P				

Matching of PMS, RAL, NCS colours and special shades upon request.

*The statements in our product and safety data sheets are based on our present experiences, however they are no assurance of product properties and do not justify a contractual legal relationship. We provide these details to inform customers about our products and their possible applications. However, on account of various factors influencing processing of our products it is absolutely essential to carry out printing trials under local production conditions. Choice of individual ink types and their suitability for the intended application is the sole and entire responsibility of the user. We do not assume any liability for any problems of technical or process-related nature. Any liability shall be limited to the value of the goods delivered by us and processed by the user.*

*All former product data sheets are no longer valid.*

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