

One-component solvent based ink suitable for PC, ABS, PMMA, PET and fabrics as Nylon.

High gloss, good opacity, excellent flexibility, applicable for screen and pad printing.

## Field of Application

### Substrates

MJKB is particularly suited to print onto:

- PC
- PET
- PMMA
- ABS
- Fabrics
- Polyester textile

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

MJKB is a high gloss ink, which has good adhesion to various substrates, especially nylon fabrics and non-woven fabrics.

MJKB is suitable for soft plastic substrates, high opacity. Suited for industrial printing applications. Depending on the substrate and the requirements, hardener can be added to the ink before printing. In general, chemical and mechanical resistances as well as adhesion are increased when hardener is used.

## Characteristics

### Drying

The drying characteristics can be adjusted with auxiliaries to the specific application (screen or pad printing). The following drying conditions can be assumed:

Pad Printing:

Touch drying: 20° C / 2-3min

Final drying: 20° C / 24H or 80° C / 15-30min

Screen Printing:

Touch-dry :20° C /30-45min

Final drying: 20° C / 24H or 80° C / 15-30min

Please note that the drying speed slows down when shades are overprinted and hardener is added.

The drying conditions mentioned above vary according to substrates, depth of cliché, ink film thickness, temperatures, and the auxiliaries used. An extended drying time is generally necessary in the case of multi-color printing or printing onto front and reverse side.

### Adhesion

MJKB inks have good adhesion and flexibility on many fabrics which have been treated for water resistance. Some fabrics may be finished or impregnated with certain waterproofing agents that may impair adhesion, even a considerable period after printing.

For maximum adhesion, it is recommended to add hardener into the ink before use. Where lower opacity is tolerable, further improvements to adhesion may be achieved by printing at a lower viscosity to aid penetration into the fabric.

In some cases, incompatibility between ink and fabric may lead to reduced tear resistance in the printed area - especially if one-component ink is used on very light weight fabrics.

### Fastness

One-component inks have excellent wash fastness to I.S.O. Test No. 1 (40° C).

By adding hardener, inks have excellent wash fastness to I.S.O. Tests Nos. 3 (60° C) and 4 (95° C).

The fastness properties will vary depending on the fabric and whether hardener is added to the ink or not.

### Workwear emblems

By adding hardener MJKB inks can be used to produce durable workwear transfers or badges

capable of withstanding high temperature industrial wash processes.

### Sportswear transfers

MJKB inks, when backed up with appropriate adhesives and dye blocking silvers, can be used to produce sportswear transfers on previously sublimated materials including sports shirts, cycle wear etc.

## Range

MJKB 021	Yellow (RS)
MJKB 026	Yellow (GS)
MJKB 031	Red (BS)
MJKB 033	Magenta
MJKB 035	Red (YS)
MJKB 036	Orange
MJKB 055	Violet
MJKB 057	Blue
MJKB 067	Green
MJKB 070	White
MJKB 073	Black
MJKB 904	Varnish

## Auxiliaries

TSP 101	Thinner, fast(10%-20%)
TS 102	Retarder, slow(10%-15%)
TS 103	Retarder, middle(10%-15%)
MH 1	Hardener (10%, pot life 6-8H)
MH 4	Hardener (10%, pot life 4-6H)
H 4	Hardener (10%, pot life 6-8H)
AE 1	Antistatic Paste (0 -15%)
NT 1	Cleaner

Hardeners are sensitive to humidity and are always to be stored in a sealed container. Shortly before use, the hardener must be added to the ink and stirred homogeneously. The mixture ink/hardener is not storable and must be processed within pot life.

Thinner is added to the ink/hardener mixture to adjust the printing viscosity. The choice of thinner and the

amount added are highly depending on the local climate and the printing speed.

It is recommended to add 30-40% thinner when MJKB is used for pad printing.

## Printing Parameters

- Mesh: 90T~165T
- Clichés: 18~25µm

## Shelf Life

Shelf life depends very much on the formula/reactivity of the ink system as well as the storage temperature. For an unopened ink container if stored in a dark room at a temperature of 15-25°C, the shelf life as below:

- Basic shades: 3 year
- Hardener: 2 years
- Antistatic Paste: 3.5 years
- Thinner and cleaner: 5 years

## Safety

MJKB inks are formulated to be free from any (toxic) carcinogenic, mutagenic or reprotoxic chemicals, free from lead and other heavy metals and is tested to comply with the EN71-3: 1995 Toy Safety Standard.

## 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 applications is exclusively your responsibility. Should, however, any liability claims arise, they shall be limited to the value of the goods delivered

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by us and used by you with respect to any and all damages not caused intentionally or by gross negligence.

## More information

The above technical information is only for MJKB, and more product information will be updated in the future.

German quality, Made for China!

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Marabu