# Maqua<sup>®</sup> Tex MAXT Maqua<sup>®</sup> Color MACXT



Waterbased Screen Printing Transfer Ink for sportswear and tagless textile decoration applications

Good opacity, High stretchy, Excellent wash resistance, Oeko-Tex 100 and REACH compliance

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# **Field of Application**

Maqua® Tex MAXT/Colur MACXT is excellently suited for most knitted and woven fabrics typically used for T-shirts, Sweat Shirts, Sports and Fashion Wear, Badges, Hats and Caps, Travel Bags, Footwear.

Formulated on non-PVC containing resins and non-phthalate plasticisers. Lead-free, unprecedented stretch properties, superb screen stability, excellent wash resistance and dye bleed resistant options.

#### **Fabrics**

Suitable for most common natural and synthetic fibres, including, Cotton and Cotton/Polyester blends. Many grades of synthetics.

Use MAXT-LBB Low Bleed Black onto most sublimated fabrics

#### Substrate

PET heat transfer film or heat transfer paper for waterbased ink.

#### **Drying**

It is vital to ensure full through-cure before overprinting and sealing the ink layer. Excessive temperatures and too short drying time should be avoided to maximize the cure of the ink, so that no water remains trapped in the ink film

Factors including ink film thickness, image size, colour, drying equipment and fabric all influence the curing schedule needed. Normally when drying in tunnel dryer, the oven temperature will need to be set approx 70-100°C for 60sec-2mins. As for wicket dryer, the drying temperature will need to be set around 60 - 70oC for 30 - 40minutes

Powdered prints are recommended to heat cure to maximise print & wash performance, suggested cure temperature is not less than heat melt temperature of powder for 1 - 3mins.

## **Characteristics**

#### **Ink Adjustment**

The ink should be stirred homogeneously before printing.

For maximum resistances are required, hardener should be added before use. Estimate the amount of ink required for a day's work and thoroughly mix the ink base and hardener in the recommended ratio:

The ink/hardener mixture is chemically reactive and must be processed within 6-8 hours. If the mentioned times are exceeded, the ink's adhesion and resistance may be reduced even if the ink still seems processable. All the catalysed ink left over at the end of the printing run must be discarded.

#### **Thinning**

Supplied press-ready. Up to 5% Water may be added if necessary. For hot-shop conditions, retarder may be added to maximize print performance and screen stability.

#### Wash-up

Wash up with water.

For dried in ink – wash up with solvent. Soaking and adding solvent to wet ink should be avoided.

#### **Fastness**

The full wash fastness of the system is dependent on the adhesive and base used. Generally 50x domestic wash fastness is achievable with MAXT ink series.

As with all transfer recommendations – it is vital to ensure suitability on the Customer supplied fabric. Due to variation in fabrics and even between batches of fabrics, full compatibility testing should be conducted prior to commencing production.

Please note that moisture content in the substrate has an influence on transferability (fabric can absorb up to 30% moisture).

# Range

# Maqua® Tex MAXT Maqua® Color MACXT



### Maqua® Tex MAXT

#### Mai

|     | •                |
|-----|------------------|
| 170 | White            |
| 904 | Special Binder   |
| LBB | Low Bleed Black  |
| 971 | White            |
| 409 | Transparent Base |

#### Fluorescent and Metallics

| 320 | Fluorescent Yellow  |
|-----|---------------------|
| 323 | Fluorescent Orange  |
| 333 | Fluorescent Pink    |
| 336 | Fluorescent Magenta |
| 321 | Fluorescent Red     |
| 364 | Fluorescent Green   |
| 193 | Rich Gold           |
| 191 | Silver              |

#### **Powder**

| P   | Powder              |
|-----|---------------------|
| PS  | Powder, stretch     |
| PLT | Powder              |
| PDB | Powder, Dye Blocker |
| PHW | Powder, high-wash   |

|     | Melting<br>Temp. | Transfer Temp. | Wash<br>Fastness |
|-----|------------------|----------------|------------------|
| P   | 130°C            | 140 - 150°C    | 40-60°C          |
| PS  | 120°C            | 130 - 150°C    | 60°C             |
| PLT | 120°C            | 130 - 140°C    | 60°C             |
| PDB | 125°C            | 135 - 140°C    | 60°C             |
| PHW | 150°C            | 155 - 165∘C    | 60-90°C          |

#### **Adhesive**

| A   | Adhesive                  |
|-----|---------------------------|
| ALT | Adhesive, low-temperature |
| ATC | Adhesive, Transfer Clear  |

|     | Wash<br>Fastness | Transfer<br>Temp. | Description                            |
|-----|------------------|-------------------|--|
| A   | 40-60°C          | 140-150°C         | Good cost and performance balance      |
| ALT | 40-60°C          | 130-140°C         | Excellent stretch and wash resistance. |
| ATC | 60-90∘C          | 155-165°C         | Awesome washing resistance             |

| iin Col | our Range and Bases | RW 2                        | Retarder           |        | Up to 3% |
|---------|---------------------|-----------------------------|--------------------|--------|----------|
|         | White               | HW 1                        | Hardener           |        | 3-5%     |
| •       | Special Binder      | HW 2                        | Hardener           |        | 1-1.5%   |
| 3       | Low Bleed Black     | Thinner is added to the ink | nlz to             | adjust |          |
|         | TATILIA             | Hillinei                    | is added to the in | iik to | aujust   |

FA

RW 1

printing viscosity. For slow printing sequences and fine motifs, it may be necessary to add retarder to the thinner

Up to 2%

Up to 5%

Hardener can be added for increased resistance and adhesion. The mixture ink/hardener must be stirred well and homogeneously. The mixture ink/hardener is not storable and must be processed within pot life. All the mix ink/hardener left over at the end of the printing run must be discarded.

#### Maqua® Color MACXT

Flow Agent

Retarder

#### **Pigment Concentrate**

| 680 | Black          |
|-----|----------------|
| 620 | Lemon          |
| 624 | Medium Yellow  |
| 626 | Orange         |
| 630 | Vermilion      |
| 650 | Violet         |
| 634 | Carmine Red    |
| 636 | Magenta        |
| 656 | Brilliant Blue |
| 654 | Medium Blue    |
| 660 | Blue Green     |
|     |                |

All color inks of this series can be mixed, please avoid mixing with other series of inks to ensure the performance of the ink.

# **Printing Parameters**

All types of commercially available fabrics and water resistant stencils can be used. We recommend using 62-120 lines/cm for printing ink and 24-48 lines/cm for printable adhesive.

### Shelf Life

#### **Auxiliaries**

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

- 1 years for all MAXT
- 2 years for all FX/FXPP standard shades. 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. All characteristics described in this Technical Data Sheet refer exclusively to the standard products listed under "Range", provided that they are processed in accordance with their intended use and only when used with the recommended auxiliaries. 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 Maqua®Tex MAXT/Maqua®Colur MACXT and the 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.