

Maqua® Coat MAF Maqua® Color MAC



Water-based spray and brush paint for PVC, polyester, TPE, TPU, wood, leather, styrofoam, cork

Satin sheen, fast drying, high opacity, for sensitive applications

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26. Feb

Field of Application

Substrates

Maqua® Coat MAF / Maqua® Color MAC is suited for applications on:

- PVC
- Wood, styrofoam, cork

After pre-treatment with low-pressure plasma, Maqua® Coat MAF / Maqua® Color MAC also adheres well to:

- Polyester
- TPU substrates
- Thermoplastic elastomers (TPE)
- Biopolymers

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

The fast drying blend of Maqua® Coat MAF and Maqua® Color MAC can be applied to non-absorbent substrates by airbrush, spray gun, or synthetic hair brush. It is therefore perfectly suited for the decoration of toys.

Characteristics

Maqua® Coat MAF and Maqua® Color MAC are suited for applications compliant with the directive 2009/48/EG ("toys directive DIN EN 71/3"). They are made without the use of BPA/BPS, and feature lowest PAH and VOC values.

Ink Adjustment

- The ink must be stirred thoroughly before and, if necessary, during production.

- Since different viscosities are required for spray and brush applications, the MAF/MAC mixture may be diluted with water.
- A consistent viscosity must be maintained throughout the production process.
- Color shades are made from a mixture of MAF basic shades and MAC color concentrates. For the mixing of opaque shades the ratio is approx. 85-90 % MAF and max. 15 % MAC.
- The mixtures can either be dispensed using an automatic dispenser or weighed manually. In this case, the density values printed on the paint can must be observed.
- For airbrush and spray applications we recommend spray nozzle diameters ranging from 0.15 to 0.5 mm depending on the desired ink application.

Drying

Maqua® Coat MAF is a very fast drying, water-based ink system. Despite the very rapid drying, the nozzles of the airbrush/spray gun will not clog. Generally, the drying speed must always be checked before further processing in order to see if the implementation of an intermediate or final drying process may be necessary.

Fade resistance

Pigments of medium to high fade resistance are used for the Maqua® Color MAC range (blue wool scale >6). The light fastness values decrease if the color concentrate ratio, or the thickness of the ink layer is reduced.

Stress resistance

After proper and thorough drying, the ink film exhibits outstanding adhesion as well as rub, scratch, and block resistance. It is characteristic for water-based ink systems that the chemical and mechanical resistance of the ink film will

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rise significantly with time. Resistance tests should be carried out at the earliest 7 days after application.

Range

Maqua® Coat MAF

170	Opaque White
191	Silver
193	Rich Gold
904	Special Binder
MAF-GV	Gloss Varnish
MAF-PT	Patina

Maqua® Color MAC Colour Concentrates

622	Light Yellow
624	Medium Yellow
626	Orange
632	Scarlet Red
634	Carmine Red
640	Brown
650	Violet
656	Brilliant Blue
660	Blue Green
680	Black

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

The addition must not exceed 15 %.

Auxiliaries

PLR	Cleaner
WR 1	Cleaner

It is recommended to use Cleaner WR 1 for cleaning the working equipment. Subsequent cleaning with PLR or other alcohol-based cleaners is possible. Alkaline cleaners may also be used.

When using a dispenser, we recommend PLR cleaner or another alcohol-based cleaner. Please note that the circuit must be rinsed with clean water. Otherwise, the MAC concentrates may thicken.

Shelf Life

Shelf life depends very much on the formula/ reactivity of the ink system as well as the storage temperature.

The shelf life of the unopened ink container is for Maqua® Coat MAF

- 2 years for MAF 170, 904, MAF-GV
- 1,5 years for MAF-PT
- 1 year for MAF 191, 193

The shelf life of the unopened ink container is for Maqua® Color MAC

- 2 years

Maqua® Coat MAF and Maqua® Color MAC are water-based ink systems and in order to avoid frost damages, they should under no circumstances (not even shortly) be exposed to temperatures lower than 5 °C during transport and storage. We recommend our products to be stored in a dark, dry and well-ventilated area at 5 °C - 35 °C, protected from heat and direct sunlight. If storage conditions do not comply with this recommendation, shelf life is no longer guaranteed.

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,

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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® *Coat* MAF and Maqua® *Color* MAC and their 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.

Water-based products typically contain isothiazolinone biocides, including methyl isothiazolinone, as in-can preservatives. Such biocides may cause allergic skin reactions in already sensitised individuals.

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