

Solvent based screen and pad printing ink for plastic, as PC, ABS, PMMA, PET, thin film and coated surface.

High gloss, good weather resistance, excellent tensile

Field of Application

Substrates

MCXA is particularly suited to print onto:

- ABS
- Acrylic/PMMA
- PC
- PET
- TPU
- Coated surface
- PA (PA6 + GF)

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

MCXA is high gloss screen or pad printing product, suitable for various high quality labels, board panel and other printing decoration needs. This product has good printability and high block resistance in continuous printing.

Characteristics

Gloss (60°C)

- Basic color: 60–70
- 970/980: 80–90

Density

- 970 White: 0.35–0.40
- 980 Black: 2.80–3.00

Chemical resistance

99% absolute ethyl alcohol, test on aluminum panel:

- Other colored surface coated with 911 varnish:
1000 DRS

Remark: Double Rub Strokes with a load of 1000g. The above results are tested by one pass 120T print screen and dried during 30min under 150°C.

Abrasion resistance

CS10 rubber, test on aluminum panel coated with primer.

- 80-100 DRS

Remark: Double Rub Strokes with a load of 500g

The above results are tested by one pass 120T print screen and dried during 30min under 150°C.

Drying

Touch dry – Screen printing:

- 80-90 °C: 15mins

Touch dry – Pad printing:

- 80°C: 5mins

Final dry:

- 80-90 °C: 60mins
- 150°C: 30mins

Printing Parameters

- Mesh: 90T-165T
- Clichés: 18-25µm

Heat resistance DE<1.0, 200°C during 30min Formability (Cold drawing property) MCXA ink series is printable on aluminium panel for sign plates. After stamping forming, no crack on ink layer.

Ink Adjustment

- 970 White and 980 Black: 1000 DRS

MCXA is a 2-component ink system. It is recommended to allow the ink/hardener mixture to pre-react for 15 minutes. When using hardener, the processing and curing temperature must not be lower than 15°C as irreversible damage can occur. Please also avoid high humidity for several hours after printing as the hardener is sensitive to humidity. Prior to printing, it is essential to add hardener in the correct quantity and to stir homogeneously. Pot life The ink/hardener mixture is chemically reactive and must be processed within 4-8 hours (referred to 20- 25°C and 45-60% RH). Higher temperatures reduce the pot life. If the mentioned times are exceeded, the ink's adhesion and resistance may be reduced even if the ink still seems processable.

Range

Basic Shades

- 920 Lemon
- 922 Light Yellow
- 924 Medium Yellow
- 926 Orange
- 930 Vermilion
- 932 Scarlet Red
- 934 Carmine Red
- 936 Magenta
- 940 Brown
- 950 Violet
- 952 Ultramarine Blue
- 954 Medium Blue
- 956 Brilliant Blue
- 960 Blue Green
- 962 Grass Green
- 970 White
- 980 Black

Metalic Shades

- 191 Silver
- 193 Rich Gold

Varnishes

- 910 Overprint Varnish

911 Overprint Varnish, with UV-Absorber
 Remark:Except colors920/924/960/962,allthe other colors are halogen free.

Auxiliaries

- TP101 Pad printing Thinner (15% - 30%)
- TP103 printing Thinner, fast (15% - 30%)
- TSP101 Thinner (15% - 30%) Thinner (10% - 20%)
- TS101 Thinner, slow (10% - 20%)
- TS102 Retarder (10% - 15%)
- TR101 Retarder (10% - 15%)
- TR102 Hardener (25%, pot life 6 - 8H)
- H1 Hardener (25%, pot life 6 - 8H)
- MH4 Hardener (25%, pot life 6 - 8H)
- H4 Hardener (25%, pot life 6 - 8H)
- AE1 Antistatic paste (10-20%)
- AY1 Matting powder (1-4%)
- AP1 Primer
- NT1 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. 3 Hardeners are not yellowing, can be used for high temperature baking products,

outdoor products. H 1 has the best outdoor yellowing resistance, MH 4 has the best chemical resistance, H 4 has the best water resistance. However, it should be noted that H 4 reacts more slowly and takes longer to dry.

The choice of thinner and the amount added are highly dependent upon the local climate and the printing speed. Preliminary trials are essential.

Marabu

The above additives can be used for all MCXA ink series, depending on the local climate, printing speed and application fields. The appropriate additive and correct quantity should be considered.

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 is as follows:

- MCXA basic shades and varnish : 3 years
- MCXA Silver and Golden: 2 year (191/193)
- Hardener and additives: 2 years
- Thinner and cleaner: 5 years

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 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 MCXA in series, and more Masia® innovative products information will be updated in the future.

German quality, Made for China!

Latest product information, follow us on Wechat

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