

Alcohol Based Permanent Marker Inks

General Information

Dokumental® MA 20xx series has an excellent overall performance and most inks are lightfast according to ISO 12757/2.

Suitable Surfaces

For most smooth surfaces, papers and cardboards.

Applicable Standards & Regulations on request**Physical Data**

Type	Colour	Viscosity at 20°C mPa s ± 0.5	Lightfastness on PVC-foil**
Dokumental® MA 2000	blue	4.5	yes
Dokumental® MA 2001	dark blue	4.7	yes
Dokumental® MA 2003	light blue	2.1	no
Dokumental® MA 2004	dark blue	3.3	no
Dokumental® MA 2010	black	4.2	yes
Dokumental® MA 2011	black	8.0	yes
Dokumental® MA 2013	black	4.0	n.d.
Dokumental® MA 2014	black	5.0	yes
Dokumental® MA 2015	black	2.4	no
Dokumental® MA 2020	red	5.1	no
Dokumental® MA 2023	red	4.4	no
Dokumental® MA 2028	red	4.5	yes
Dokumental® MA 2029	red	1.9	no
Dokumental® MA 2031.1	dark green	5.3	yes
Dokumental® MA 2032.1	yellow green	6.1	yes
Dokumental® MA 2034.1	green	6.2	yes
Dokumental® MA 2035	green	4.5	yes
Dokumental® MA 2036	green	2.7	no
Dokumental® MA 2040.1	violet	4.6	yes
Dokumental® MA 2041	blue violet	4.7	no
Dokumental® MA 2050.1	brown	4.7	yes
Dokumental® MA 2051.1	dark brown	5.4	yes
Dokumental® MA 2060.1	yellow	4.6	yes
Dokumental® MA 2061.1	orange	6.0	yes
Dokumental® MA 2062.1	red orange	4.7	yes
Dokumental® MA 2070	pink	4.5	no
Dokumental® MA 2071	magenta	4.3	no
Dokumental® MA 2072	lilac	4.8	n.d.

** according to ball point pen norm ISO 12757 part II; n.d.: not determined

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Suitable Components

The inks are incompatible with polystyrene, ABS and polyamide (NYLON)

Nibs:	polyester, acrylic
Reservoirs:	polyester, polypropylene
Barrels:	polypropylene, rigid PVC, for pure aluminum, corrosion tests are recommended in order to approve the compatibility with the different aluminum qualities available on the market
Caps, Plugs:	polypropylene, HD-polyethylene

It is mandatory to approve the compatibility of the ink and the components as well as the performance of the writing system.

Storage, Handling & Transportation

Before use of our product the filling station has to be maintained and cleaned carefully. The inks are sensitive to any kind of contamination. Cross-contamination of the inks may lead to a colour mismatch or will even lead to a defective marker or shorter shelf life.

Store our product frost protected and avoid direct sunlight. The recommended storage temperature is between 10°C and 30°C. Storage temperatures of above 30°C for several days bear the risk of a reduced shelf life of the ink.

The shelf life of the inks in original sealed containers is 2 years.

After usage the drums have to be closed again tightly. Horizontal storage of the markers is recommended in order to get the maximum shelf life.

CAUTION: the inks are classified as flammable liquids! For detailed safety information refer to the respective Material Safety Data Sheets.

Packaging

standard packaging: 20kg plastic canister (further packaging units on request)

Produced by

DOKUMENTAL GmbH & Co KG
 Wöllnerstraße 26
 D-67065 Ludwigshafen
 Phone: +49(0)621/37702-200
 Fax: +49(0)621/37702-391
 Mail: info@dokumental.de
www.dokumental.de