

# Technical Data Sheet

## Dokumental® CC 33xx Magic Inks

### Magic Inks With a Double Colour Change

#### General Information

The fibre pen inks of Dokumental® CC 33xx series are magic inks with double colour change. The colour can be changed by using the erasing liquids Dokumental® LF 4205.1 and LF 4204.

#### Suitable Surfaces

For all kind of papers

#### Certificates / Approvals / Regulations

ASTM D-4236: All inks are ASTM D-4236 approved. The finished markers need separate ASTM D-4236 approval  
EN 71/3 (Safety of Toys, Migration of certain elements) and the US-Standard ASTM F963-91.  
ISO 9001

#### Physical Data

| Type                | Colour | Changed Colour<br>LF 4205.1 | Changed Colour<br>LF 4204 | Viscosity at 20°C<br>mPa s<br>± 0.5 | Surface tension<br>mN/m<br>± 2.0 | pH-Value<br>± 1.0 | Density at 20°C<br>g/cm³<br>± 0.01 |
|---------------------|--------|-----------------------------|---------------------------|-------------------------------------|----------------------------------|-------------------|------------------------------------|
| Dokumental® CC 3300 | blue   | pink                        | turquoise                 | 2.5                                 | 32.5                             | 5.4               | 1.05                               |
| Dokumental® CC 3310 | black  | red                         | green                     | 3.0                                 | 32.5                             | 5.2               | 1.05                               |
| Dokumental® CC 3320 | red    | dark red                    | yellow                    | 2.6                                 | 32.5                             | 7.0               | 1.05                               |
| Dokumental® CC 3330 | green  | yellow                      | dark green                | 2.5                                 | 30.8                             | 5.8               | 1.05                               |
| Dokumental® CC 3340 | violet | pink                        | blue                      | 2.5                                 | 32.5                             | 5.9               | 1.05                               |
| Dokumental® CC 3350 | brown  | orange                      | light green               | 2.5                                 | 32.5                             | 5.5               | 1.05                               |
| Dokumental® CC 3361 | orange | red                         | yellow                    | 2.7                                 | 32.0                             | 7.0               | 1.05                               |
| Dokumental® CC 3311 | grey   | pink                        | light green               | 2.5                                 | 32.0                             | 6.0               | 1.05                               |

#### Suitable Components

Nibs: acrylic material, sintered polyethylene, polyester

Depending on the chemical characteristics of the nibs a slight colour change of the ink during storage at elevated temperatures might be possible.

Nibs made of polyamide are not recommended due to possible colour changes. Therefore a careful test with nibs is essential

Reservoirs: polyester (the compatibility with acetate reservoirs must be tested in advance)

Barrels, Caps, Plugs: polypropylene, ABS, polystyrene, butadienstyrene, polyethylene

#### Packaging

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

#### Produced by

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#### Storage, Handling & Transportation

Store frost protected. Optimal storage temperature is between 0 and 30°C. Storage temperatures above 30°C can result in reduced shelf life of the bulk inks.

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