

# Technical Data Sheet

## Dokumental® TS 47xx T-Shirt Marker Inks

### Water Based, Washable T-Shirt Marker Inks

#### General Information

The inks of Dokumental® TS 47xx series are water based and are removable from most fabrics at 60°C laundry temperature. All colours can be mixed in any ratio in order to generate new, individual colours.

#### Suitable Surfaces

Textiles

#### Applicable Standards & Regulations on Request

#### Physical Data

Type	Colour	Viscosity at 20°C mPa s ± 1.0	Surface tension mN/m	Density at 20°C g/cm <sup>3</sup> ± 0.01	pH-Value ± 1.0
Dokumental® TS 4702 A	blue	4.2	> 49.7	1.04	5.0
Dokumental® TS 4703 A	dark blue	4.2	> 48.4	1.04	5.0
Dokumental® TS 4711 A	black	6.1	> 48.7	1.04	5.3
Dokumental® TS 4721 A	red	4.9	> 58.5	1.04	5.1
Dokumental® TS 4732 A	green	4.6	> 53.2	1.04	5.6
Dokumental® TS 4733 A	light green	5.1	> 53.7	1.04	5.1
Dokumental® TS 4742 A	aubergine	4.9	> 54.2	1.04	5.6
Dokumental® TS 4743 A	violet	4.2	> 48.3	1.04	5.6
Dokumental® TS 4752 A	brown	5.3	> 50.0	1.04	5.3
Dokumental® TS 4753 A	light brown	5.0	> 50.0	1.04	5.5
Dokumental® TS 4762 A	yellow	5.1	> 51.4	1.04	5.3
Dokumental® TS 4763 A	orange	5.0	> 43.7	1.04	5.1
Dokumental® TS 4771 A	pink	4.7	> 53.4	1.04	5.8
Dokumental® TS 4772 A	rose	4.6	> 49.4	1.04	7.0
Dokumental® TS 4781 A	turquoise	5.5	> 51.4	1.04	5.9

#### Technical Advice

##### Suitable Components

Do not use polystyrene, ABS or polyamide!

Nibs: polyester, acrylic, polyamide(Nylon)  
 Barrels, Caps and Plugs: PVC, butadiene-styrene, polypropylene  
 Reservoir: polyester, polypropylene, cellulose acetate

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

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

The inks contain biocides to prevent microbial growth, but for best protection we additionally recommend to ensure best hygienic conditions in production areas as well as cleanliness of all marker components.

#### Storage, Handling & Transportation

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.

After usage the drums have to be closed again tightly.

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

#### Packaging

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

#### Produced by

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