

Technical Data Sheet

Dokumental® SP 38xx Fineliner Inks

Water-Based Fineliner Inks with extended cap-off properties

General Information

The inks of Dokumental® SP 38xx series have extended cap-off properties (two weeks and longer can be achieved with suitable nibs at 20°C under ISO 544 (23°C/50%RH) conditions).

Suitable Surfaces

All kind of papers

Applicable Standards & Regulations on Request

Physical Data

Type	Colour	Lightfastness (ISO 14145)	Viscosity at 20°C mPa s ± 0.5	Surface tension mN/m ± 2.0	pH-Value ±1.0
Dokumental® SP 3800 B	blue	Part 1	2.5	40.5	7.2
Dokumental® SP 3810 B	black	Part 2	3.9	40.5	8.4
Dokumental® SP 3811 B	black	Part 2	4.4	40.0	7.1
Dokumental® SP 3820 B	red	Part 1	3.0	40.5	7.0
Dokumental® SP 3830 B	green	Part 1	2.8	40.5	5.0

ISO 14145: Roller ball pens and refills -- Part 1: General use, Part 2: Documentary use

Technical Advice

General Remarks:

Dokumental has tested the performance, long term stability and shelf life of the inks in the laboratory under typical terms of use in a limited number of writing systems. As there is a large variety of writing system components available on the market, Dokumental can NOT give a general guarantee for the inks in all writing systems. Therefore, it is mandatory to approve the compatibility of the inks and the components as well as the writing performance, long term stability and the shelf life of the inks in the customer's components. Important and decisive parameters are:

1. Climatic conditions: Temperature and Humidity
Especially exposure to high temperatures and high humidity may accelerate the aging of the ink in original ink drums as well as in the writing system. This may lead to reduced shelf life of the products. Therefore, long term stability and shelf life of the writing system must be tested thoroughly under those climatic conditions, which are expected during the storage time and the practical use of the writing system.

2. All materials, which get into contact (short term or long term) with the inks during processing and manufacturing of the writing instruments, like hoses, pipes, pumps, funnels, storage tanks, cleaning liquids etc.: All such contact materials may not release any contaminations to the inks. Contamination of the inks may lead to undesirable effects like performance loss and/or reduced shelf life.

3. All materials, which get into contact (short term and long term) with the inks in the writing system like tips, barrels, reservoirs, tubes, metal parts etc.: Long term oven test at elevated temperature (recommended is 40 to 50 °C) must be carried out to prove long term compatibility of all components and materials.

4. The inks contain biocides to prevent microbial growth. However for best protection we additionally recommend to ensure best hygienic conditions in pen production areas as well as proper cleanliness of all pen components.

Nibs:

Dokumental Fineliner Inks are suitable for extruded plastic nibs with adapters made out of plastic, nickel-silver, brass nickel plated and stainless steel. Our customers must test the compatibility of their pen components with our inks thoroughly prior to the production of pens.

Barrels, caps, plugs:

Polypropylene

Reservoirs:

Polyester

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Storage, Handling & Transportation

Store our product and the produced writing instruments frost protected and avoid direct sunlight. The recommended storage temperature for the ink in the original containers is 10 °C to 30 °C. Storage temperatures of above 30°C bear the risk of a reduced shelf life of the inks and the writing system. The recommended storage temperature for best shelf life of the produced writing instruments is 10 to 25 °C.

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

Packaging

20 kg plastic canister

200 kg plastic drum

1,000 kg IBC

Produced by

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