# Technical Data Sheet **Docu**® Ball Pen Inks



## Entry Level Ball Pen Inks

#### **General Information**

The Docu® series is our entry level ball pen ink. It features the writing properties you expect from Dokumental® at a favourable price. All of the inks have clear drain properties in suitable refills.

#### **Suitable Surfaces**

All kind of papers

#### **Applicable Standards & Regulations on Request**

#### **Physical Data**

Туре	Colour	Lightfastness (ISO 12757)	TF	Viscosity at 20°C mPas ± 1,000	Surface tension mN/m	pH-Value
Docu® blue	blue	Part I	yes	18,500	> 35	4.0 - 6.3
Docu® violet blue	violet blue	Part I	yes	18,500	> 35	4.3 - 6.3
Docu® black N	black N	Part II	yes	18,500	> 34	4.7 - 6.7
Docu® jet black	jet black	Part II	yes	18,500	> 35	4.7 - 6.7
Docu® ruby red	ruby red	Part I	yes	18,500	> 36	4.0 - 6.0
Docu® scarlet red	scarlet red	Part I	yes	18,500	> 34	4.3 - 6.3
Docu® green	green	Part II	yes	18,500	> 34	4.3 - 6.3

ISO 12757: Ball point pens and refills - Part I: General use, Part II: Documentary use, TF: Transparent Flux (clear drain in suitable refills)

### **Technical Advice**

Suitable Components:

All ball pen inks are suitable for plastic and metal refills.

For capillary refills, the use of ink follower Dokumental® IF 4312 colourless will increase the shelf life and will improve clear drain property. For jumbo refills, the use of ink follower Dokumental® IF 4310 white or IF 4311 white is mandatory in order to prevent back-leakage. For further information about our ink followers see the Dokumental® IF 43xx technical data sheet

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 refill 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.

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

The shelf life of the inks in original sealed containers is 4 years.

#### **Packaging**

20kg plastic canister 200kg plastic drum 1,000kg IBC

## Produced by

DOKUMENTAL GmbH & Co KG Wöllnerstraße 26 D-67065 Ludwigshafen

Phone: +49(0)621/37702-321
Fax: +49(0)621/37702-391
Mail: info@dokumental.de
www.dokumental.de