

Quick drying Gel Inks (Water Based)

General Information

The inks of Dokumental® QG 88xx series are a newly developed kind of dye-based gel ink. They are drying very fast and show significantly less smearing than standard gel-inks. The inks are available in a wide range of colours.

Suitable Surfaces

All kind of papers

Applicable Standards & Regulations on Request

Physical Data

Type	Colour	Lightfastness (ISO 27668)	Viscosity at 20°C mPa s ± 100	Surface tension mN/m	pH-Value ± 1
Dokumental® QG 8800	brilliant blue	Part I	370	> 40	6.0
Dokumental® QG 8801	light blue	Part I	370	> 40	6.0
Dokumental® QG 8802	royal blue	Part I	370	> 40	6.0
Dokumental® QG 8810	black	Part I	450	> 40	6.5
Dokumental® QG 8820	red	Part I	370	> 40	6.0
Dokumental® QG 8821	ruby red	Part I	370	> 40	6.0
Dokumental® QG 8830	green	Part I	370	> 40	6.0
Dokumental® QG 8831	light green	Part I	370	> 40	6.0
Dokumental® QG 8832	dark green	Part I	370	> 40	6.0
Dokumental® QG 8840	violet	Part I	370	> 40	6.0
Dokumental® QG 8845	purple	Part I	370	> 40	6.0
Dokumental® QG 8850	brown	Part I	370	> 40	6.0
Dokumental® QG 8860	yellow	Part I	370	> 40	6.0
Dokumental® QG 8861	orange	Part I	370	> 40	6.0
Dokumental® QG 8862	gold	Part I	370	> 40	6.0
Dokumental® QG 8872	strong pink	Part I	370	> 40	6.0
Dokumental® QG 8880	turquoise	Part I	370	> 40	6.0

Technical Advice

Gel Tips:

The Dokumental® QG 88xx Series gel inks have extensively and thoroughly been tested with SS gel tips. Other gel pen tips may also be suitable, but in such a case pilot studies must be carried out carefully at the refill manufacturer's side prior to the production of refills. BNP or brass tips are not approved for the use with Dokumental® Gel Inks.

Tubes, tips adapters & tip protector caps:

Polypropylene is recommended.

Storage, Handling & Transport

All Dokumental® QG 88xx series gel inks demand careful handling and processing during refill production.

The filling station has to be maintained and cleaned carefully.

The inks are sensitive to any kind of contamination. Contamination of the inks may cause colour mismatch or will even lead to a defective refill.

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.

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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 2 years.

Processing of Dokumental® Gel-Inks

The use of an ink follower is very important in order to avoid back leaking of the inks, as well as evaporation of the solvent (water). The filling height of the ink follower should be at least four times the inner diameter of the tube. During ink consumption (writing) a part of the follower will stick to the inner surface of the refill tube. This will lead to a reduction of the height of the „follower plug“. The follower will not be coloured by the ink after storage. For suitable followers see the Dokumental® IF technical data sheet.

Degassing: to avoid the formation of air bubbles during storage of ready made pens it is recommended to degas the inks before injecting into refills.

The injection of the ink is the most critical part of production and has to be carried out with the lowest possible pressure at the injection pump. This will avoid or reduce the formation of air bubbles in the refills from the beginning. A careful choice of the pump and the largest possible nozzle opening are very important.

Slight centrifugation, depending on diameter of the centrifuge, to remove air-bubbles between ink and ink follower is recommended. For further information you can contact our technical department.

Tip protection

Tips of the refills must be protected with a tight cap (e.g. rubber) in order to avoid drying out and back leaking of the refills during storage. For the same reasons pens must be equipped with a cap having an inserted small piece of an elastic material which touches and seals up the tip.

Packaging

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

Produced by

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