



## HYDROPRINT inks for small offset printing

With the HYDROPRINT ink series a product has been developed with the many requirements of small offset printing in mind.

### Process

Because of the steady progress in the development of small offset machines a high level of technical perfection has been reached which is expressed in the printing speeds now possible and in the degree of automation.

Within the large variety of machine types available two basically different inking-/fount systems dominate which have a considerable influence on the ink-/water balance: the combined inking-/fount system (for instance the Hydrocolor system) and the separate inking-/fount system. This puts high demands on the adaptability of the printing inks.

### Plates and chemicals

In addition to the large variety of machines, the plates which range from paper- to aluminium plates and the necessary many different chemicals are further critical factors which have to be taken into consideration in ink formulation.

Developers, fixers, gum, etch- and wetting agents have a considerable influence on the offset process. As a printing forme in the conventional field the presensitized aluminium plate is common. For direct imaging there are special paper plates. In the electrostatic process we distinguish between zinc oxide plates and metal plates (for instance Elfasol, OPC). The increasingly used photo-direct plates are available on the basis of polyethylene- and polyester-coated paper. For the silver-diffusion process aluminium, plastic or paper is used as a basis.

### HYDROPRINT inks

Based on intensive development work combined with long-term testing under practice conditions we can offer with our HYDROPRINT small offset range a standard ink series which is remarkable for its excellent printability and trouble-free handling.

The inks are highly concentrated thereby offering high colour strength and mileage. Since small offset inks are mostly used on absorbent uncoated papers, the inks are formulated to stay open in the ink duct, on the rollers, and in opened cans. They do not skin over. If required the oxidation drying can be sped up by adding from 1 up to 4% **Grafo-Drier Extra 10 T 5001**.

A range of 15 coloured inks is available from stock in 1 kg tins. From this 9 are matched to HKS®-respectively PANTONE® basic colours. Further shades may be mixed on the basis of these colour mixing systems. For process printing the colours of the European process series are included in the range.

As special batches (starting from 20 kgs per colour) the coloured inks are also available with other properties or specific features as required. The main colour in small offset printing remains Black. Consequently a wide range is available from stock.

We recommend particularly:

#### **HYDROPRINT Black 49 F 1017**

Standard quality universal small offset black.

- For all types of machines.
- For separate and combined fount/inking units.
- For all printing plates.
- Dries by penetration and stays open on the press.
- For uncoated papers.
- Regular consistency.
- Neutral, slightly bluish shade.

#### **HYDROPRINT Black 49 NH 1009 09**

Special black for plastic-coated plates such as Rapilith, Verilith, Supermaster and Silvermaster.

- For all types of machines.
- For combined inking-/fount units.
- For plastic-coated plates, however also for ZnO-, paper- and aluminium plates.
- Dries by penetration and is duct-stable, moderate stay-fresh properties on the rollers.
- For uncoated papers.
- Particularly stiff consistency.
- Neutral, slightly bluish shade.

#### **HYDROPRINT Black 49 NH 1020 09**

Special oxidation drying quality for coated papers and cardboard stocks. The inking unit must be cleaned after the job has been completed.

- For all types of machines.
- For separate and combined inking-/fount units.
- For all printing plates.
- Quickly drying by oxidation.
- For all papers and boards.
- Regular consistency.
- Strong bluish cast, not resistant to spirit and nitro varnish.

### **Fount concentrate**

The fount solution, too, must conform to the special conditions prevailing in small format offset printing. For all common small offset presses, particularly for those equipped with Heidelberg's "Direct Dampening System" or similar systems, we recommend to use

### **DIRECT-FLUID 8300 09**

DIRECT-FLUID helps to quickly develop a stable ink/water balance and supports quick clearing of the printing plates. It can be used with both aluminium and photo-direct printing plates.

In direct film systems, adding alcohol can be dispensed with.

For further details please revert to [TI 25.08 E](#).

### **Labelling**

HYDROPRINT inks and DIRECT-FLUID

German Hazardous Substances Ordinance (GefStoffV): none

Safety data sheet available on request.

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Contact addresses for advice and further information: [www.hubergroup.de](http://www.hubergroup.de)

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