

Special ink series for poster printing

The new generations of HIT process inks (HIT = HIGHLY IMPROVED TECHNOLOGY) from the **huber**group are manufactured in optimised production processes. The special constituents of the process inks are matched precisely to the individual stages in the manufacturing process. The wetting medium and the finely controlled dispersion conditions have been chosen so as to ensure that the ink pigments are coated completely and in a stable manner with binder; the binder components selected specifically for these pigments actively support this wetting process. Thanks to this fresh optimisation of the "HIGHLY IMPROVED TECHNOLOGY" process, the printing characteristics of the HIT process inks have been greatly improved. The improvements in quality are to be found in areas such as the development of colour intensity, gloss, rub resistance, flow behaviour, damping solution tolerance, stability at high printing speeds and further processing.

The HIT technology guarantees a high level of production reliability and the best print results.

Poster printing is extremely critical to printing inks as regards fastness and, in particular, lightfastness. In principle printing inks with a light-fastness of WS 6 or higher (according to DIN 16 525) should be used for such jobs. Especially for this application we recommend the series listed in the table below.

		Fastness characteristics per DIN 16 524/25			
		Light WS	Alcohol	Solvent mixture	Alkali
Plakat-Gelb (Yellow)	41 N 5010	6	+	-	+
Plakat-Rot (Red)	42 N 5010	6	+	+	+
Plakat-Blau (Blue)	43 N 5010	8	+	+	+
Plakat-Schwarz (Black)	49 N 5010	8	+	+	+
High lightfastness					
Plakat-Gelb (Yellow)	41 N 5020	7	+	+	+
Plakat-Rot (Red)	42 N 5020	7	+	+	+

With special colours it is necessary – as a result of limited pigment selection – to make concessions as regard the desired colour shade.

Special properties

- Rapid attainment of stable ink/water balance.
- Rapid setting, good stacking properties.
- Rapid oxidative drying.
- Good scuff resistance.
- High or even very high light-fastness.

Application

The two poster series have been developed for printing jobs where a high or very high degree of light-fastness is important. They are suitable for all sheet-fed presses and dampening systems, and for all absorbent coated and uncoated substrates.

Qualification

Under certain conditions, there is a possibility of the red inks suffering discoloration. When posters are glued to galvanised metal billboards, spotting may occur on the posters due to the inevitable weathering to which the posters are subjected. The cause of this is a chemical reaction brought about by interaction between the zinc in the galvanised metal, moisture and the red pigment. High temperatures and a large amount of glue can actually speed up and intensify this effect even more.

The only way to combat this problem is to use special red inks whose pigments do not react in this way under these conditions.

Such inks are, for example:

Red 42 Q 6609

However, the light fastness of this ink is not particularly high: WS 5. The price of this special red ink is around that of standard poster red.

or

Red 42 Q 6629

The light fastness of this ink is WS 6. The price, however, is roughly 2 to 3 times that of standard poster red.

Additives

Use the following additives if it is necessary to adapt the poster ink to special printing conditions:

- for sensitive substrates use **Paste Reducer 10 T 9998**,
- use **MONSUN 10 T 7265** to accelerate oxidative drying.

Labelling

German Hazardous Substances Ordinance (GefStoffV): none

Safety data sheet available on request.

How supplied

2.5-kg vacuum-tins

For general information about light-fastness of offset and letterpress inks see TI 29.1.02 E.

Contact addresses for advice and further information can be found under www.hubergroup.de

This Technical information reflects the current state of our knowledge. It is designed to inform and advise. We assume no liability for correctness. Modifications may be made in the interest of technical improvement.