NewV brid – UH 4000

UV-curing sheet-fed offset hybrid ink for absorbent substrates

Process colour		Fastness properties according to ISO 12040 / ISO 2836				
		Light WS	Alcohol	Solvent mixture	Alkali	UV-coating
Yellow	**41 UH 4000**	**5**	**+**	**+**	**+**	**+**
Magenta	**42 UH 4000**	**5**	**+**	**+**	**-**	**+**
Cyan	**43 UH 4000**	**8**	**+**	**+**	**+**	**+**
Black	**49 UH 4000**	**8**	**+**	**+**	**+**	**+**
Lightfast versions						
Yellow	**41 UH 4001**	**7**	**+**	**-**	**+**	**+**
Magenta	**42 UH 4001**	**7**	**+**	**+**	**-**	**+**

Table 1: Resistances of the NewV brid standard process inks

Special Properties

- Can be used with conventional roller materials; no need to install special equipment on the press [1]
- High colour intensity
- Rapid adjustment of a stable ink / water balance
- Wide range of fount solution tolerance
- Colour shades in accordance with ISO 2846-1/ ISO 12647-2
- Can be UV-varnished inline (without primer)
- High gloss values can be achieved in combination with UV varnish

The inks can be varnished with UV varnishes without any need to use primer. This means inks and varnishes can be applied wet-on-wet on presses equipped with just one varnishing unit. We recommend application of a UV varnish in order to provide effective protection of the print image (see TI “NewV lac for UV curing”).

Range of applications

The UH 4000 series is suitable for:

- Coated and uncoated papers and card stocks
  Highly absorbent stocks can greatly reduce the curing speed.
- Top-coated grades of board [2]

1 Investigations conducted with regard to the resistance properties (swelling / shrinking) of conventional roller compounds have not revealed any issues. Nevertheless, we do not as yet have any long-term empirical values we can draw on, which leads us to recommend that you use special materials suitable for alternating use of conventional and UV inks in order to be on the safe side. If you use NewV brid for only a small share of your print jobs (up to 15%), we do not expect any problems to arise if you continue to work with conventional roller compounds. Due to the different conditions that occur for each job – which are beyond our influence – we are not able to accept liability for any possible effects the products may have on rollers. Variations in the conditions on press can lead to varying results with respect to swelling, etc.

2 Non-absorbent substrates must have a surface tension of at least 38 mN/m in order to ensure optimum ink adhesion. We generally recommend running an adhesion test before beginning the actual print run.

Matt finish effects

Matt finish effects and certain structural effects can be achieved by combining NewV set / NewV brid inks and NewV lac varnishes with conventional oil-based varnishes. If you would like more information in this regard, please contact us.

Food and confectionery packaging

More information on the subject of food and confectionery (semi-luxury foods and tobacco) packaging can be found in the information sheet entitled “Printing inks for food packaging” published by the German Printing Ink Manufacturers’ Association and in TI “NewV UV inks and varnishes for food packaging”.

Printing auxiliaries

The inks are always supplied ready to use. The following auxiliaries are available to help you adjust the process inks in exceptional cases:

- up to 3% **NewV sup Hybrid Thinner 40 U 1405**

For further auxiliaries, see TI “NewV sup UV printing auxiliaries”.

Classification

Safety Data Sheet available on request.

Shelf life

At least 12 months when stored under the correct conditions (20°C, protected against heat and light).

How supplied

2.5-kg cans