Technical Information

50.P.917 | Radiation-curing Systems | Ink Series, Process Inks





NewV® poly LED

LED curing ink for sheet-fed offset inks on non-absorbent substrates

NewV poly LED inks are high sensitive UV inks with intense colour for LED curing applications. They are suitable for all common LED lamps with the wavelength 385 and 395nm.

The NewV poly LED inks show good adhesion on non-absorbent substrates.

Properties

- Conform with the requirements of the EuPIA Exclusion Policy
- Sufficient curing
- Good transfer
- Good printability
- Low swelling, optimised for NBR and EMPD rollers
- Low dot-gain
- High colour intensity
- Good adhesion on non-absorbent substrates
- Rapid adjustment of a stable ink / water balance
- Good performance on high speed presses
- Colour shades in accordance with ISO 2846-1

Process colours	Calan and	Fastness properties according to ISO 12040 / ISO 2836				
	Sales code	Light WS	Alcohol	Solvent	Alkali	UV varnish
Yellow	41 UPL 4000	5	+	+	+	+
Magenta	42 UPL 4000	5	+	+	-	+
Cyan	43 UPL 4000	8	+	+	+	+
Black	49 UPL 4000	7	+	+	+	+

+ yes - no

In addition to the process colours any further shades can be formulated on this basis. All colours are formulated without "Fanal" pigments.

Substrates

The **NewV poly LED** ink series is suitable for:

- Pre-treated, non-absorbent substrates such as PE, PET, PP, BOPP, PVC, PS, etc.
- Aluminized paper and cardboard¹ stocks
- Aluminium foils ¹

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¹ The surface tension of non-absorbent substrates must be 38 mN/m or higher in order to ensure optimum ink adhesion. We generally recommend to carry out an adhesion test before starting the actual print run.

Application

These products are also suitable for printing in-mould labels. Considering the variety of substrates in the market, we recommend to carry out adequate testing before starting the commercial production.

The adhesion of UV curing inks and varnishes to plastic films, cast-coated stocks and pre-treated metal surfaces may be negatively influenced by separating agents, lubricants or plasticisers adhering to these surfaces (especially plastic films). We do explicitly not recommend printing on metal surfaces that are not pre-treated, due to unfavourable adhesion characteristics between the UV ink/varnish film and the substrate surface.

Favourable results of the adhesive (Scotch) tape test do not necessarily imply good scratch resistance (fingernail test). In such cases the application of a UV curing varnish can help to improve the scratch resistance. In any case, adhesive (Scotch) tape testing results must be adequate to ensure proper subsequent processing. As mentioned above, we recommend to carry out adequate testing before you start the commercial print run, due to the wide range of substrates with different properties available on the market

As always in case of UV printing, the amount of fountain solution should be kept as low as possible, to avoid emulsion and ink-water balance problems.

We recommend that to make a preliminary test before regular jobs goes to printing.

This ink is not suitable for high-speed machines (max. 10.000 speed).

Auxiliaries

The **NewV poly LED** inks are ready to use products. In case small adjustments are needed for special requirements, please find the recommended additives in our technical information sheet: 50.A.901 *NewV* sup_Auxiliaries for radiation-curing offset printing.

Food and confectionery packaging

The products listed above are not suitable for printing primary food packaging or secondary packaging where the primary layer is not a barrier against migration of substances from the printed layer to the packed product. More information on the subject of packaging for food, cosmetics, pharmaceutical products, tobacco can be found in the information sheet 50.G.002 NewV for food packaging. Please also find information on the webpage of the European Printing Ink Association: www.eupia.org.

Shelf life

The minimum shelf life of these products is 18 months from the production date, if the container is not opened. Dependent on the storing and handling conditions, the products may be usable much longer. Further information: Store between 5 - 25°C. Higher storage temperature may reduce shelf life. Protect from frost and sunlight. The cans need to be closed back immediately after usage.

Packaging

2.5 kg cans

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