Technical Information

50.P.201 | Radiation-curing Systems | Ink Series, Process Inks





NewV set LED

LED curing ink for sheet-fed offset, rotary and narrow web offset printing on absorbent substrate

NewV set LED series 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.

Properties

- Stable ink / water balance
- Fast curing
- High gloss
- Low dot gain
- Good transfer
- High mechanical film resistance
- Colour shades in accordance with ISO 2846-1 and ISO 12647-2
- Can be used for laser printing, hot foil stamping and cold foil lamination (preliminary test required)
- Optimized for NBR and EPDM rollers

| Process colours | Sales code | Fastness properties according to ISO 12040 / ISO 2836 | | | | |
|--------------------|-------------|---|---------|-----------------|--------|------------|
| | | Light WS | Alcohol | Solvent mixture | Alkali | UV varnish |
| Yellow | 41 UEL 4000 | 5 | + | + | + | + |
| Magenta | 42 UEL 4000 | 5 | + | + | - | + |
| Cyan | 43 UEL 4000 | 8 | + | + | + | + |
| Black | 49 UEL 4000 | 8 | + | + | + | + |
| Deep Black | 49 UEL4010 | 8 | + | + | + | + |
| Lightfast versions | | | | | | |
| Yellow | 41 UEL 4001 | 7 | + | + | + | + |
| Magenta | 42 UEL 4001 | 6 | + | + | + | + |

Substrates

NewV set LED series are suitable for:

- Coated and uncoated papers and card stocks
- Are tested for deinkability according to INGEDE method 11 for coated and uncoated substrates.
- Thermal papers
- Conditionally for pretreated PE, PP (corona or gas flame) or preprimed material ¹ Top-coated grades of board ¹

¹ 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.

Applications

A number of thermal papers react to UV vehicles. For this reason, always carry out a test prior to beginning the print run.

By the reason of the high mechanical stability of the cured ink layer, on coated papers no varnish protection is needed, however in case of special substrates or more demanding applications we recommend to use UV varnish in order to provide effective protection for the printed image (see Technical information about "NewV lac for UV curing").

Please consider that highly absorbent stocks can significantly reduce the curing speed and the surface properties.

Printing auxiliaries

The **NewV set 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: *50A001 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.

Classification

Safety data sheet is available on request.

Shelf life

The minimum shelf life of these products is 18 months from the production date if the container is not opened. But dependent on the storing and handling conditions, they can be usable much longer. For extending the warranty period, please contact our sales representatives.

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