

Technical Information

50.P.004 | Radiation-curing Systems | Ink Series, Process Inks



NewV[®] poly

ITX - free, UV curing ink for sheet - fed offset, rotary and narrow web offset printing on non - absorbent substrate

The **NewV poly** series offer very good adhesion and intensive colours on non-absorbent substrates. They were developed for sheet-fed, rotary label (letterpress) and continuous forms printing with standard mercury lamp curing unit. The **NewV poly** inks are VOC free and do not include ITX.

Properties

- Good adhesion on non - absorbent substrates
- Fast curing
- High colour intensity
- Good transfer
- ITX - free
- Rapid adjustment of a stable ink / water balance
- Colour shades in accordance with ISO 2846-1 and ISO 12647-2

Process colours	Sales code	Fastness properties according to ISO 12040 / ISO 2836				
		Light WS	Alcohol	Solvent mixture	Alkali	UV varnish
Yellow	41 UP 4010	5	+	+	+	+
Magenta	42 UP 4010	5	+	+	-	+
Cyan	43 UP 4010	8	+	+	+	+
Black	49 UP 4010	8	+	+	+	+
Lightfast versions						
Yellow	41 UP 4001	6	+	/	+	+
Yellow transparent	41 UP 4002	7	+	+	+	+
Magenta	42 UP 4001	7	+	+	+	+

+ yes - no /= conditionally recommended

Substrates

The **NewV poly** series are suitable for:

- Pre-treated, non - absorbent substrates such as PE, PP, BOPP, PVC, PS, etc.
- Aluminium - vaporised paper and board¹ and card stocks
- Aluminium foils¹

Applications

We recommend the application of a UV varnish in order to provide effective protection for the printed image. For more information about our varnishes, please visit our website.

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 recommend not printing on metal surfaces that are not pre-treated due to unfavourable adhesion characteristics between UV ink/varnish films and the substrate surface.

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.

The good resistance result of the adhesive (Scotch) tape test does not necessarily imply good scratch resistance (nail test). In such cases the application of a UV curing varnish can help to improve the scratch resistance. Due to the differences between wide ranges of substrates mentioned above, we recommend you to carry out tests before you start the commercial print run.

The special formulation of our **NewV poly** system causes an optimal adherence on non-absorbent substrates. This can determine an increased swelling-performance on mixed-rollers.

Therefore we recommend the pre-inspection of the swelling performance in case of using the **NewV poly** series with mixed rollers.

For more information, please see our Technical Information "NewV UV-curing inks and varnishes".

Printing auxiliaries

The **NewV poly** 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 12 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