



NewV pack MGA metal pigmented UV inks

UV curing metallic inks for sheet-fed offset, rotary and narrow web offset for food packaging

NewV pack MGA metallic inks are designed for the use on the non-food contact side of food packaging. They are also recommended for secondary packaging when the primary -food contact-layer, does not have the right barrier properties to prevent the migration from the ink/ varnish layer into the foodstuff.

NewV pack MGA metallic inks give a special look to the printed product. They have good brilliance and metallic effect, good printability and consistency during the printing run. They are developed for conventional mercury lamps.

Two-component systems – PANTONE colour shades		
Description	Sales code	Mixture share
Gold PANTONE 871 – 876		
NewV pack MGA - 2K Gold varnish PANTONE 871	871 UGM	55%
NewV - 2K Rich gold paste	46 MGA 8050	45%
NewV pack MGA - 2K Gold varnish PANTONE 872	872 UGM	60%
NewV - 2K Rich gold paste	46 MGA 8050	40%
NewV pack MGA - 2K Gold varnish PANTONE 873	873 UGM	55%
NewV - 2K Rich pale gold paste	46 MGA 8150	45%
NewV pack MGA - 2K Gold varnish PANTONE 874	874 UGM	60%
NewV - 2K Pale gold paste	46 MGA 8250	40%
NewV pack MGA - 2K Gold varnish PANTONE 875	875 UGM	60%
NewV - 2K Rich pale gold paste	46 MGA 8150	40%
NewV pack MGA - 2K Gold varnish PANTONE 876	876 UGM	60%
NewV - 2K Pale gold paste	46 MGA 8250	40%
Silver PANTONE 877		
NewV - 2K Silver varnish PANTONE 877	877 UGM	65%
NewV - 2K Silver paste	46 MGA 9050	35%

Substrates

- Coated and uncoated papers and cardboards

Application

Recommended roller coverings and blankets: EPDM and NBR

To obtain a perfect metallic effect, the pH-value cannot be lower than 5.5. By the reason of the printing characteristics of the metallic inks there is a possibility to use only 8-10% of isopropyl-alcohol in the dampening, without adding fountain solution additive.

Mixtures of metal pastes and UV-curing varnishes tend to polymerise (cure) very quickly. For this reason, they need to be mixed right before the printing starts, not sooner. After mixing two components together, the print has to start.

The cured ink film is organoleptically neutral. It will not change the scent, taste or the colour of the foodstuff. However the fact that the substrates provide odour after passing under the UV lamp, has to be taken into account. This increased odour can be sensed after the curing process.

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

As always in case of UV printing, the amount of fount solution should be kept on the minimum to avoid emulsification and ink/water balance problems.

Please consider that in case of using the printing press for dual-mode (with inks and varnishes recommended for and not recommended for food packaging), even after a careful cleaning, the blankets, rollers, pipes can release the substances they had absorbed during using non-food packaging products. This can cause cross-contamination and can have negative effect on the migration test results.

Postprint finishing

The best metallic effect is obtained only on coated stocks that have an even, smooth surface, because of the reflexion of the light:



The metallic effect cannot be enhanced by increasing the ink thickness. This simply leads to printing problems like piling, poor curing, very low smudge and rub resistance.

A rule, especially for solid image areas: never print silver ink from the last unit. Smoothing out the print with passing under an additional blanket before curing helps to enhance coating quality.

These UV metallic inks are suitable for inline or offline UV varnishing, but please consider, the application of UV varnish or lamination significantly reduces the metallic effect.

If the print is to be laminated, prior tests are always necessary before the printing run. UV prints (without UV varnish) are not suitable for gluing, blister packaging, hot foil stamping, etc.

Adhesion problems arise very often during post-print finishing of metal-pigmented offset prints. In this case, we recommend you to carry out pre-production adhesion and scratch resistance test.

Auxiliaries

The **NewV pack MGA metallic** 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: *NewV sup_Auxiliaries for UV food packaging printing_offset*. Only auxiliaries that were developed for food packaging are allowed to be used to keep the migration properties of the ink.

By the same reason we recommend special fount solution concentrates for applications where the migration from the printing components has to be avoided. For further information about them, please read the related *technical information sheet: 50.F.002 NewV fix for food packaging*.

Never use photoinitiators or photoinitiator pastes for these products and never use anti-drier, anti-skin on the ink or freshener on the rollers.

Food and confectionery packaging

Regulation (EC) No 1935/2004 requires that the materials and articles which, in their *finished* state, are intended to be brought into contact with foodstuffs or which are brought into contact with foodstuffs, must not transfer any components to the packed foodstuff in quantities which could endanger human

health, or bring about an unacceptable change in the composition or deterioration in organoleptic properties.

Provided that our products cited above are used in accordance with the information given in our technical information sheets and correctly processed and cured, and provided that the food packaging is designed in a way that there is no intended food contact with the print, we hereby confirm that our products will in principle allow compliance of the final product with Regulation (EC) No. 1935/2004.

- The **huber**group products cited above are formulated and manufactured in compliance with the EuPIA "Good Manufacturing Practices (GMP) – Printing Inks for Food Contact Materials" published by EuPIA, the European Printing Ink Association.
- To prevent any contamination with components from conventional inks, the NewV MGA products are manufactured in a separate production area specifically designated for this purpose.
- The products are compliant with section 8b ("packaging inks") of the Swiss Ordinance 817.023.21 (Verordnung des EDI über Bedarfsgegenstände vom 23. November 2005.).

The manufacturer (printer, converter) of the packaging and the filler who puts the foodstuff into the packaging have the legal responsibility to verify that the finished product fulfils the legal and industrial requirements.

To allow other members of the packaging chain to assess compliance of the printed packaging with the Framework Regulation (EC) No.1935/2004, the Plastics Regulation (EU) No. 10/2011 and/or the Swiss Ordinance 817.023.21, the "Statement of Composition" (SoC) is available on request. Please note that when carrying out a risk assessment, paper, board and many plastic materials, like PE or PP are not sufficient barriers for migratable substances from UV curing inks and varnishes.

More information on the subject of packaging for food, cosmetics, pharmaceutical products and tobacco can be found in the information sheet *50.G.002 NewV MGA products _UV inks and varnishes for food packaging*. Please also find information on the webpage of the European Printing Ink Association: www.eupia.org.

Classification

Safety Data Sheet 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

Varnishes

2,5 kg cans

Pastes

1,5 kg cans