



NewV pack MGA premium Opaque White

for UV food packaging printing

Among all the available colouring agents (pigments, dyes), titanium dioxide is the white pigment that offers very good coverage properties (opacity) and provides a high degree of whiteness. By this reason all types of opaque white inks contain a high concentration of this pigment.

Opaque white inks are used in coloured printing inks to give them an opaque appearance or for direct printing of substrates in order to mask them.

NewV pack MGA premium opaque white inks are designed for the use on the non-food contact side of food packaging. The products mentioned below are recommended for offset printing with standard mercury lamp curing unit.

Properties

- High reactivity
- Fast curing
- Very good opacity
- Good printability
- High brilliance
- Excellent organoleptic properties („Robinson tests“ EN 1230 Parts 1 and 2)

Name	Sales code	Fastness properties according to ISO 12040 / ISO 2836			
		Light WS	Alcohol	Solvent mixture	Alkali
NewV pack MGA - untoned	47UG0001M	8	+	+	+
NewV poly MGA - toned	47UP0002M	7	+	+	+

Substrates

- Coated and uncoated papers and cardboards

Using these inks on non-absorbent substrates such as cast-coated materials (Chromolux), aluminium vaporised or PE-coated papers/boards as well as foils, adhesion and scratch-resistance tests must be conducted on the applied substrate before the commercial production.

Applications

Depending on the substrate one or two layers of opaque white may be needed. Due to the limited thickness of ink film that can be transferred in the offset process, and the colour of the surface different results are obtained on different substrates (e.g. grey board, brown board, etc).

High quantities of opaque white can slow down the UV curing process.

To obtain a good white shade after one pass, 2.0 – 2.5 g/m² ink application rate of is required. The application with two plates results in even better quality and smoother layer.

The cured ink film is organoleptically neutral. It will not change the odour, taste, or colour of the foodstuff. However, the fact that substrates may 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.

In order to provide improved protection to the print, we recommend applying UV varnish. For further information please find the technical information sheets of *NewV lac_Varnishes for food packaging* on our webpage.

Auxiliaries

The **NewV pack MGA premium opaque white** 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 fountain solution concentrates for applications where the migration from the printing components has to be avoided. For further information about them, please read the product *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, 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 **hubergroup** 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 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 (3kg opaque white ink)