

Van Genechten chooses Siegwerk «Low Migration» inks

Herbert Noichl, CEO of the Van Genechten Packaging Group, states: «In food applications, the packaging has to meet the most stringent safety requirements. Using NUTRIPACK inks is a key contributor in making our packaging safer and more sustainable.»

The Van Genechten Packaging Group is one of the largest European manufacturers of fold-up boxes with nine operations in Benelux, France, Germany, Poland and Russia. The largest share comes from fold-up packaging for all kinds of foodstuffs. In addition, luxury

and premium applications as well as packaging for cosmetics and microwave products are also key parts of the range. Herbert Noichl explains the reason for concluding the strategic contract with Siegwerk as follows: «Not only were we impressed by the potential of Tempo NUTRIPACK. Through our partnership with Siegwerk, we want to be perceived as a **competent and responsible specialist for food packaging.**»

Tempo NUTRIPACK is an innovative «Low Migration» sheet-fed offset ink which complies with the strict legal requirements regarding the migration limits for printed food packaging. Tempo NUTRIPACK shows practically no odour and, moreover, is a pioneer sheet-fed printing ink which is both free of mineral oil and genetically modified components. (www.vangenechten.com)



From left to right: Martial Buttin, Evi Vandenzavel, Asmus Wolff, Herbert Noichl, Hugo Noordhoek Hegt, Bruno Delanoë

New UV offset black

Process: UV sheet-fed offset
Application: Packaging, luxury packaging
Series: Sicura PLAST LO
Product number: 71-900247-9

Outstanding adhesion and formidable scratch resistance are the great advantages of this new Siegwerk development.

Usually, adhesion is obtained using soft resin systems while mechanical properties are achieved by hard systems. A combination of these properties is particularly interesting for luxury applications printed on metallised polyesters. Such jobs require multiple passes on press and the prints are handled several times. Scratches on the printed plastic package may occur before the job is varnished or laminated. The newly developed UV offset intense black features **outstanding adhesion properties and at the same time offers superb scratch resistance.** This breakthrough fits printers' expectations especially in the field of luxury applications, where high standards of quality are required.

Fantastic food grade Gold and Silver

Process: Conventional sheet-fed offset | Application: Food packaging
Series: Tempo NUTRIPACK

Very low Robinson index and a low migration performance making compliance with the food packaging regulations easy.

These metallic inks have been developed following the Tempo NUTRIPACK concept and are perfectly in line with the sensorial and migration characteristics of the series. Furthermore they offer a bril-

liant aspect, an excellent metallic effect and a very good opacity. Printability, water/ink balance and setting speed are some of the other advantages of these Tempo NUTRIPACK metallic inks. Available as 2-component system, these inks offer flexibility to printers and allow shade customisation at the latest stage of the printing flow.



Experience Report

UV offset inks for metal decoration at Massilly France

Massilly France, based in Mâcon, is part of the Massilly Group, which specializes in metallic packaging and employs a workforce of 1,200 persons in its 25 companies.

Stéphane Lequin, site manager in Mâcon, explains why Massilly France has

chosen Siegwark as preferred ink supplier. He says: «Due to its top-quality UV offset inks, Siegwark has been our supplier and partner right from the start. What mattered was not only the suitability of products, but also the ability to allow innovative solutions for our range of food packaging.»

Two ink series merit to be highlighted in this context: The **Sicura PLAST LM** series stands out for its extremely low tendency to migrate and for its excellent adhesion to non-absorbent substrates. The **Sicura PLAST LO** series has both low odour and outstanding adhesion properties. (www.massilly.com)



Trends in vegetable-oil-based inks

Environmental concerns and the attitude of many end-users towards petroleum derivatives and VOC's (volatile organic compounds) are the reasons for the increasing demand for vegetable-oil-based inks. These inks demonstrate a much better behaviour on the printing machines. Their raw materials come from renewable sources whilst mineral oils are of fossil origin.

For more than 30 years, conventional offset inks have been made using a blend of mineral and vegetable oils. Because offset inks with a higher content of vegetable oil are more stable on press and perform better on 4+4 machines, the demand for these inks is constantly growing.

The designation «vegetable-based technology» is connected to the introduction of vegetable esters. These **fatty acid esters allow the reduction or even**

the elimination of mineral oils. Europe is ahead of the vegetable-based technology by the use of vegetable esters instead of mineral oils. Siegwark sheet-fed products are wholly in line with the market demands. In the **Siegwerk Tempo range**, ink binders and oils are based on renewable vegetable raw materials. They guarantee good runnability and press stability and they meet the required migration threshold values.

Information

Price increase in raw materials

Not only have the prices of pigments and solvents increased, but also those of the raw materials for the manufacture of binders. A major reason for the price rise

is the shortage of basic commodities following the economic downturn as many suppliers of chemicals reduced their production capacities dramatically.

State-of-the-art equipment for migration testing

Thanks to its analytical laboratories in Annemasse, France, Siegwark is able to support printers and converters in their validation process of the final packaging.

In these analytical laboratories, expert technicians carry out both **migration and sensorial analyses** (sniff test and Robinson test). The labs are equipped with an extensive range of gas and liquid chromatographs along with UV and mass spectroscopy in order to analyse numerous migrants at a very low detection level. Migration methods with several types of simulants are available (water, Tenax®, ethanol 95%), depending on the substrate, the condition of use and the foodstuff properties, taking account of current regulations.

The exemplary pretesting of our formulations thus makes sure that the «Low Migration» package of Siegwark inks is fully state-of-the-art (Tempo NUTRIPACK for conventional offset, Sicura LM for UV).



Estelle Gueneau, Annemasse Analytical Laboratory Manager, injects a material sample into the GC/MS gas chromatograph.

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