SIEGWERK

LABEL

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News for Label Printers

Process: UV offset, UV flexoprint
Application: Food packaging and labels

UV Inks and Varnishes for Sensitive Applications

SICURA LM 100 (UV offset)
SICURA LM 250 (UV offset)
SICURA FLEX OPV LM300 85-601689-4
SICURA FLEX OPV LM301 85-601690-2

Printing inks and varnishes with low migration tendency are indispensable if the risk of chemical contamination is to be avoided. For migration-sensitive applications (such as food packaging), Siegwerk recommends inks and varnishes with photoinitiators which do not migrate from the ink film on account of their long chain molecules.

The above-listed UV inks and UV varnishes do not contain benzophenone or any of its derivates, such as 4-MBP or other low molecular weight photoinitiators.

The SICURA LM series is part of a **new generation of inks and varnishes formulated with specially selected components.** The risk of possible migration through the print substrate or of set-off in the stack or roll (from the printed side to the side that comes into contact with the food) is reduced to the absolute minimum.

In addition to the advantage of low migration tendency, SICURA LM products have a very low odour. They also possess excellent chemical stability and an attractive gloss. ◆

Process: UV flexoprint
Application: Labels on foodstuffs

Low Migration and Silicone-free

SICURA FLEX 39-9P SF
SICURA FLEX OPV 85-601853-6 (gloss varnish)
SICURA FLEX OPV 85-601851-0 (matt varnish)

On account of their low susceptibility to migration and barely perceptible odour, both the SICURA FLEX 39-9P SF series and the two above-mentioned UV varnishes are mainly used for printing **labels in the foodstuffs area.** Thanks to the absence of silicone, the printed product can easily be overprinted (e.g. in thermal transfer printing) or embossed.

The inks and varnishes now exhibit significantly lower viscosity and lower thixotropy. The result is a considerable improvement in flowability. The excellent reactivity displayed by the inks and varnishes enables high machine speeds to be achieved. ◆

Good to Know

UV Inks and Varnishes for Non-food and Food Applications

Incidents concerning food packaging due to printing with unsuitable inks are currently causing concern among many printers and packaging companies.

For decades, the printing ink industry has supplied UV inks and UV varnishes with photoinitiators that exhibit a tendency to migration. The low molecular weight photoinitiator benzophenone, for example, can migrate through the print substrate or be deposited on the back of the print substrate when stacked. **With regard to non-food packaging, this migration is unimportant and poses no risk whatsoever.** Migrating ink systems may even be used for the production of food packaging provided that a reliable barrier is present between the printed layer and the contents and that no set-off takes place.

Packaging printers whose products are not intended for food or pharmaceutical use, therefore need not conduct any migration tests.

In the foodstuffs area, migration limits have been set by law. Photoinitiators which have not undergone toxicological testing, no traces of them are permitted in food. For many years, Siegwerk therefore has offered **low-migration ink systems with polymeric photoinitiators for migration-sensitive applications.** Due to their higher molecular weight, these materials are less mobile and exhibit virtually no migration. Siegwerk will gladly evaluate your applications on request if you have any concerns. Please contact your Siegwerk application technician.

Test Report

SICURA PLAST SP for Sleeves

At the end of April this year, Müller Martini Druckmaschinen GmbH, the well-known manufacturer of web offset machines in Maulburg (Germany), tested the SICURA PLAST SP UV series under production conditions and was impressed. The print machine operated faultlessly at 250 m/min.

Roland Ingendoh

«The half-day, highly professionally organised printing of sleeves film took place on a new Alprinta 74 machine made by Müller Martini. Various types of PVC shrink film were used as the substrate. The average **printing speed reached the 250 m/min mark** over large parts of the production, and moreover, with flawless drying.

The SICURA PLAST SP inks demonstrated excellent adhesion on the substrates. The UV Opaque White 1170 of the SICURA FLEX 39-3 series which was printed last in reverse printing was a success too.

Some of the printed sleeves are shrunk by as much as 60 % – with lower ink coverage even more.

The 4-colour set and the PANTONE® basic colours are available in the SICURA PLAST SP series.»

Roland Ingendoh, Technology Manager Labels

Information

New Denominations for White and Metallic

Siegwerk has divided up the different white and metallic inks into separate series. The product properties remain unchanged, only the designations have been altered. A list of the old and new designations is available. You will find it on the Siegwerk website:
> www.siegwerk.com > Customer Segments > Labels > Service > Branding Survey

Good to Know

Make Use of the Technical Data Sheets

For the benefit of printers, all our technical data sheets can now be called up from the Siegwerk website without a password. These data sheets are always up to date and compliant with the regulatory environment. In addition to important safety instructions, the technical data sheets also contain details of applications, suitable substrates, properties and stability of the ink or varnish. The reference numbers and recommended additives also appear on the data sheets.
> www.siegwerk.com > Customer Segments > Labels > Service > Technical Data Sheets

Process: UV screenprint
Application: Labels

Approved Screenprint Series Now Even Better

SICURA SCREEN 78-3

This tried and tested series stands out for its attractive gloss, good adhesion properties and optimum scratch resistance. It is ITX-free and contains neither benzophenone nor 4-methylbenzophenone. The series is based on a **state-of-the-art additive technology** the benefits of which include improved curing of the ink film. Even the occasionally experienced problem of pinholes (minute holes in the next ink printed) is not an issue. The 78-3 series can be used on a **wide range of synthetic label materials.**

The inks not only exhibit excellent cohesion with one another, but can also be easily printed on UV inks of other print processes. ◆

Process: UV flexoprint
Application: Labels on foodstuffs

Low Migration Gold and Silver

SICURA FLEX METALL
MF RAD LM Gold RG 0001
MF RAD LM Gold RBG 0001
MF RAD LM Gold BG 0001
MF RAD LM Silver 0001

6 gold shades and one silver make up the new LM series from Siegwerk for migration-sensitive applications, such as food packaging and labels. Based on the SICURA 39-9P SF formulations, these low migration metallic inks were developed **with high molecular weight photoinitiators** in order to avoid any relevant migration through the substrate.

The new series of gold and silver shades can be **printed just as easily as conventional metallic inks, exhibit the same high durability** and the gloss achieved compares well to the customary results. Packaging and labels printed with attractive, lustrous metallic inks sell better. Why not take advantage of this attractive design opportunity? ◆