

NARROW WEB

News for label printers · BU Narrow Web · EMEA Edition



SICURA Nutriflex 10 – with even better adhesion

Process: UV flexographic printing
Application: Labels, food packaging
Series: SICURA Nutriflex 10

It is the proven low migration series for practically all labeling applications in the food industry – ideal in color intensity, reactivity and flow properties.



By modifying just a few components, we have **greatly improved the adhesion properties** without any change in the excellent UV resistance of this popular UV standard series. **The new series also allows higher machine operating speeds.** Furthermore, the series stands out for its beautiful gloss and almost imperceptible odor. The inks can be overprinted with thermal transfer printing, hot stamping or by inline laminating without any problem. The highly pigmented color set of SICURA Nutriflex 10 is «High Definition» certified (HD Flexo).

NEW: Extremely abrasion-resistant UV flexo gloss varnish

Process: UV flexographic printing
Application: Labels
Product number: 85-600747-1

This high-gloss UV overprint varnish is scratch-resistant and yet flexible. It provides optimum protection and gloss at the same time.

High-gloss overprint varnishes are frequently weak and the varnished labels often get scratched during transport. Siegwirk's new UV flexo gloss varnish has been specifically designed for such applications in order to protect against scratching and

help the product retain its beautiful gloss. A totally new raw material that is tough and flexible at the same time enables a combination of mechanical strength and flexibility. **The cured coating layer is simultaneously hard but not brittle, thus proven to be very resistant to abrasion.**

The new UV gloss varnish can easily be printed on paper, cardboard and plastic substrates with flexographic printing or varnishing units.

Have you looked at our new website yet?

Click now on www.siegwerk.com. We have worked very hard to provide you with as much information as possible. Please let us know what you think of our website. We would appreciate your comments.

Also new is that you can subscribe to receive this newsletter by e-mail (click >News >Newsletter >Narrow Web Newsletter).

New solvent-based silver – totally free of mineral oil

Process: Flexographic and gravure printing
Application: Food packaging, labels
Product number: 10-411266-9

The food industry has been waiting for these metallic inks.

Metallic inks based on aluminum pigments often contain trace elements of mineral oil (prescribed limit < 0.1%), to which food experts have frequently objected because these trace contaminants can migrate into the food and thus find their way into the human organism.

By using aluminum pigments entirely free of mineral oil, Siegwirk presents **metallic inks guaranteed to be free of mineral oil**, which fully comply with the requirements of the food industry, e.g. chocolate manufacturers. Find out more from your Siegwirk application technician.



New UV Relief Varnish LM

Process: UV screen printing

Application: Labels

Series: SICURA Nutriscreen

Product number: 85-600579-8



The varnish has an approximate relief height of 250 µm. It dries excellently, remains flexible and shows no yellowing.

This new low migration relief varnish is used primarily to apply raised, tactile warning symbols onto packaging as notices of hazardous contents. Packaging like this must be labelled throughout Europe with a raised symbol for the blind and visually impaired (EN Standard 272 or ISO 11683). Packaging manufacturers prefer to apply



the warning symbol as a label that can be screen-printed using clear relief varnish. This relief varnish is **scratch-proof and has a shiny surface.**

Printer's corner

Potential problems during thermal transfer printing, hot foil stamping and cold foil printing

The three above-named processes all involve pre-printed bobbins comprising the actual label material, the glue for self-adhesive labels, and a silicone-coated release liner. Most problems arise when the color-printed surface of the label material poorly retains the thermal transfer printing, the metallization of the hot stamping or the UV adhesive of the cold foil printing. In the worst case it fails to retain them at all.

Poor adhesion of the overprint could be due to the following reasons:

- Unsuitable type of ink ribbon in the thermal transfer printer. Resin ribbons may be scratchproof and resilient, but often exhibit poor initial adhesion to the label material. The correct solution is usually to use a hybrid ribbon.
- Sometimes, it appears the subject pre-printed by the UV process becomes too strongly hardened on the label material, and is therefore responsible for the inadequate adhesion of the overprint. In this case, again, a different ink ribbon

should be used. It is not recommended reducing the UV lamp power, since this would run the risk of worsening the UV curing.

- Adhesion problems can also arise if the pre-printed ink contains silicone. Likewise, inks with too many additives can cause adhesion problems (e.g. waxes, matting agents or other fillers). The solution is to use wax-free and silicon-free printing inks for printing the label material.
- In cold foil printing, the amount of adhesive transferred must be adapted to the print pattern. A minimal amount of adhesive is required to achieve sufficient adhesion. Excess adhesive, by contrast, leads to over-filled design elements. Where necessary, the amount of adhesive must be adjusted by using a different anilox roller.
- Label printers are always advised to include a test run with the intended overprinting process before the production print run.

Ask your Siegwerk application technician to send you the new **«Siegwerk explicit» on thermal transfer printing, hot foil stamping and cold foil printing.**

INKday 2015 in Russia



on 16 June 2015 in Moscow

Another event of the successful INKday series by Siegwerk is coming up – an ideal forum for meeting experts, sharing ideas and discovering new solutions. The main focus will be on the following topics: **Low Migration Ink systems, energy-saving UV curing systems and inks for special applications.** So don't miss this day and save the date in your agenda. We look forward to meeting you in Moscow!