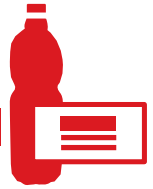


NARROW WEB

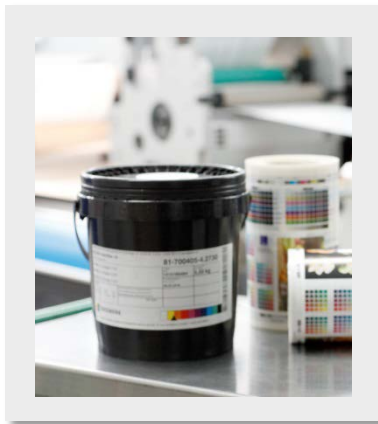
News for Narrow Web Printers | Canada & U.S. (CUSA) Edition



Low Migration LED UV Inks for Food Packaging

Siegwerk is the first manufacturer to introduce low migration LED UV printing inks for food packaging.

An increasing number of printers are opting for LED UV technology. Five years ago, Siegwerk was the first to develop working LED UV inks. Now – after extensive testing and successful production – Siegwerk is again **the first to provide low migration LED UV inks for printing food packaging and labels**. A highly welcome innovation for the industry! The new LEDTec ink series is based on the successful series SICURA Nutriflex 10.



LED UV lamps only emit light in a narrow spectral range. Energy-wasting IR radiation and hazardous UV-B and UV-C radiation The most successful UV Opaque Whites by Siegwerk are a thing of the past. Besides energy efficiency and low heat production, another advantage is that no ozone is produced, so there is no longer any need for extraction.

To learn more, see us at Labelexpo at booth #5923.



LABELEXPO AMERICAS 2016

Visit us at
Labelexpo
Booth #5923

Learn about our newest technology for **UV LED for food and pharmaceutical packaging** --SICURA Nutriflex LEDTec ink series.

See a live demo of **Fast Match**, a sophisticated approach to existing **color matching technology** that reduces press downtime and offers real-time ink formula on-press corrections.

INKDAY 2016 CHICAGO

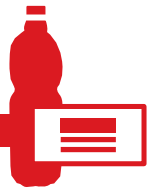
On **August 9th, 2016** we will be hosting INKday in the Windy City – it's a forum for meeting experts, sharing ideas and discovering new solutions in the world of ink! This year we are excited to announce our keynote speaker is **Stephen Klump, Head of Packaging Quality and Safety Nestlé**.

Speak to your Siegwerk sales representative for more info

Sessions will vary from narrow web and flexible packaging topics that include:

- Color matching efficiencies
- Continuous improvement
- Functional OPV
- Inks for retort
- Inks for tobacco packaging
- Innovations and new developments
- Low migration
- UV LED solutions
- WB/UV technology with shrink sleeve





Using Potassium Permanganate to Check Curing UV Opaque White and Varnishes

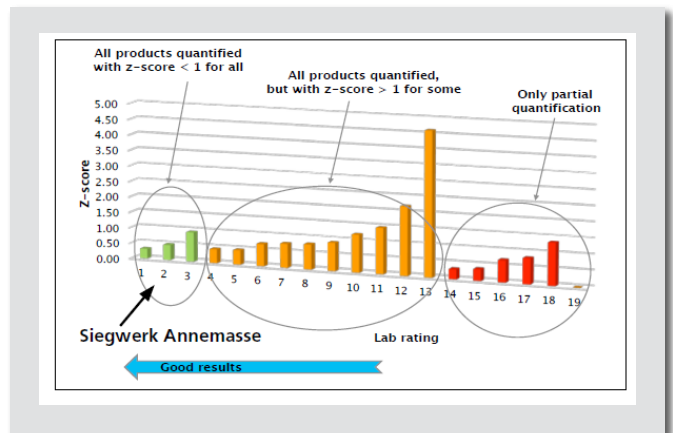


The paler the patch, the better the opaque white/varnish has cured.

To check for correct curing of UV opaque white and UV printing varnishes, create a reference sample by dripping a drop of 5% potassium permanganate solution (KMnO₄) onto a fully cured printout and then dab it off after 30 seconds. Because potassium permanganate is a strong oxidizer, un-crosslinked acrylate double bonds go dark, thus indicating insufficient curing. Control samples can be produced in the same way during production and be compared with the reference sample by densitometrically measuring the colored patch. (Yellow = ok, red or brown = insufficient.)

Top Score For Annemasse Laboratory

A total of 19 European laboratories of printing ink manufacturers and third parties laboratories participated in the **round-robin test** in the 3rd quarter of this year, organized by the German reference office for food proficiency testing and reference materials (DRRR). Accredited testing laboratories have to submit tests at regular intervals. The materials to test this time were five acrylates of unknown concentration. Only 3 of the 19 participating laboratories achieved the top global score, which Siegwerk Annemasse was one of them. (2nd green column from left).



Our Most Successful UV Opaque Whites

Product name	Viscosity Pa.s @ 73° F	Pigmentation	Wax*	Silicone*	Comments
FL 39-5 Opaque White	0.55	Very High	no	no	UV Flexo
UV Flexo Opaque White	0.7	Very High	no	no	UV Flexo
Flexo FC DB Opaque White	0.3	High	no	no	UV Flexo
85-5 Opaque White M-6	0.7	Very High	no	no	UV Rotary Screen
RS 85-5 Opaque White	0.9	High	no	no	UV Rotary Screen
RS 78-5 Opaque White	0.85	High	no	yes	UV Rotary Screen
SAS Shrink Sealant White SR2	0.8	Very High	yes	yes	UV Shrink Sleeve Flexo
Flex SAS 1/D FC Bond White A01	0.45	Very High	no	no	UV Shrink Sleeve Flexo
Flex SAS FC SP 2/D Bond White	0.6	Very High	yes	yes	UV Shrink Sleeve Flexo
LED Flexo Op. White	0.6	High	yes	no	LED Flexo
LMF 39-10 UV Flexo Op. White	0.7	High	no	no	UV Low Migration Flexo



*wax or silicone are used in sleeve colors to achieve the necessary coefficients of friction (COF).