



Process: UV sheet-fed offset, UV web offset  
Applications: labels, packaging

## SICURA PLAST LO – for ultra-low odour

*SICURA PLAST LO*

The lowest possible odour at the same time as **outstanding adhesion on synthetic materials** – these are the major benefits of this new series. Working in close collaboration with narrow web press manufacturers and important customers, Siegwerk ink engineers have succeeded in developing this special product range.



Applications requiring low odour levels could be OPP wrap-around labels (e.g. for PET or glass bottles), sleeves of PVC or OPP and packaging for cosmetics, spirits and tobacco. Aside from these substrates, the series is applied for PE, PS, metallised paper and board, primed metallised polyester and primed aluminium foil.

SICURA PLAST LO can also run in combination with solvent-based rotogravure opaque white and can be used with an alcohol-free dampening solution, a unique feature in this market which greatly boosts productivity. Printers appreciate the new series for its user-friendliness. ◆

## The latest UV technology for label printing



**Long talked about and now reality. Siegwerk presents the newly developed LED inks at Labelexpo, and they can be seen in practical use on the Gallus stand.**

LEDs (light-emitting diodes) are based on the principle of electroluminescence: a tiny semiconductor panel emits light when subjected to an electric current. This light **consumes very little energy, the diodes have a very long working life and generate no ozone.**

The pioneering achievement of the Siegwerk ink specialists lies in **developing UV flexographic printing inks, UV screen print inks and UV overprint lacquers for the specific radiation spectrum of LED light** that cure fully despite the low energy and are

a match for conventional UV inks in terms of drying speed. LED lamps consist of countless small LED panels arranged in multiple rows across the entire width. They emit only a small range of the conventional spectrum of UV lamps. In particular, the high-energy IR radiation and the hazardous UV-B and UV-C radiation are absent.

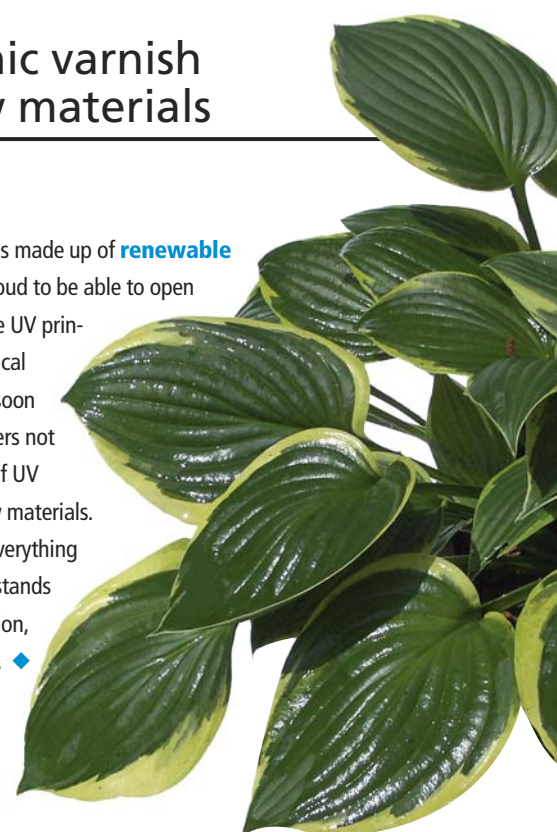
As with every innovation, the lamps and inks are currently still more expensive than those for conventional UV drying. The minimization of energy consumption, elimination of any air exhaustion and the greater work safety are powerful arguments in favour of the new LED technology. Added to this is the fact that unlike the conventional technology, LED lamps require no warm-up time when switched on. ◆

Process: UV flexo  
Application: labels

## NEW: UV flexographic varnish from renewable raw materials

*SICURA ECO OPV*  
Product number: 85-600405-6

**More than 50%** of this new overprint varnish is made up of **renewable components**. With this varnish, Siegwerk is proud to be able to open a new chapter in the development of sustainable UV printing inks and varnishes. Thanks to the technological breakthrough, Siegwerk is confident that it will soon be able to offer environmentally conscious printers not only the overprint varnish, but also a full series of UV printing inks consisting largely of renewable raw materials. The new SICURA ECO OPV varnish gives them everything they expect from a modern overprint varnish. It stands out for its attractive gloss, good protective function, excellent durability and freedom from yellowing. ◆



Process: UV flexo  
Application: labels

## New non-thickening matt varnish

39-0 Matt Varnish 001  
Product number: 85-600347-0



Process: UV flexo  
Application: sleeves

## New UV flexographic opaque white for sleeves

SICURA FLEX 39-9P SF  
Product number: 81-010206-1

This new, highly opaque **reverse printing white for the production of shrink sleeves** may be used for all types of foodstuff primary packaging due to its polymeric photoinitiators. It is distinguished by excellent adhesion, has good flow properties and an **excellent laydown on the pre-printed inks and the substrates**. It also has the necessary **slip coefficients** to ensure trouble-free placement of the sleeves over the containers.



### Good to Know

#### «Low Migration» for foodstuffs packaging

We frequently draw attention to the importance of the difference between undemanding packaging and foodstuffs packing. Whereas with ordinary packaging, the migration of minute quantities of material from the ink or varnish through the print substrate is unimportant, migration in the foodstuffs area is strictly controlled by law. Foodstuffs are not permitted to contain any traces of migrating substances.

Give your printing an attractive appearance through the alternating use of matt and gloss varnishes!

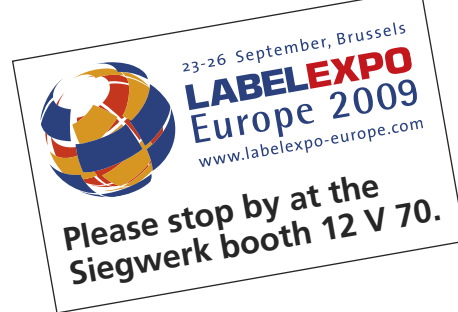
For technical reasons, UV matt varnishes very frequently have the undesirable property of thickening in the varnishing unit. With the aid of a new generation matting agent and special wetting additives, Siegwirk has succeeded in producing a matt varnish that **does not thicken thanks to the homogeneous particle size**.

This new, high quality matt varnish forms a nice even matt surface, is exceptionally easy to print with and maintains its constant low viscosity in the varnishing unit. ◆

**Slip coefficient** – Coefficient of force (in N/cm) required to overcome the sliding friction entailed by the surface characteristics of sleeve and container.

Besides its outstanding printing properties, the new opaque white exhibits high mechanical stability, making it suitable for shrink processes using hot air as well as steam. Its high reactivity allows high production speed. ◆

Siegwerk has for many years offered **low-migration ink systems** with polymeric photoinitiators **for migration-sensitive applications** and that is to say both for UV flexo as well as for UV offset and UV letterpress. These include the SICURA PLAST LM, SICURA LM 100, SICURA 39-9P-SF ink series and various LM varnishes. Please do not hesitate to contact your Siegwirk application technician if you require any further information.



Process: UV flexo  
Application: labels

## 39-8 – a pioneering series

SICURA FLEX 39-8

Only launched in 2009 and already a top-selling series. The 39-8 is perfectly tailored to the requirements of label printing and ideally satisfies flexographic printers' desires with regard to flow properties and reactivity. The excellent runnability has been achieved through systematic adaptation of the formulation and the use of state-of-the-art raw materials. The inks are very highly pigmented, making them exceptionally intense in colour. The results achieved in the production of plastic labels are outstanding. Despite the low viscosity, **top quality results are obtained with papers and thermal papers**, thanks to the absence of undesirable absorption of the ink through the paper.



A significant improvement in thixotropy has also been achieved through the use of novel pigments with better flow properties. Moreover, the series is additive-free and can be combined with UV screen printing and UV offset without a problem. A further advantage of this ink series is its favourable price-performance ratio. ◆