



Process: UV flexoprint
Product: Labels

39-8 Series – A Big Seller

UV SICURA FLEX 39-8
39-8 Process Magenta C 0001 80-800698-5
39-8 Process Magenta HC 0001 80-844168-7



This ink series is still relatively young but it appears to satisfy the current needs of flexo-printers in terms of flow characteristics and reactivity. Good printing properties were achieved by carefully adapting the formula. These inks are very highly pigmented, making them exceptionally intensive in colour. Despite their low viscosity, they are outstanding for use with **plastic labels and also for printing on paper and thermal paper**. Undesirable absorption of ink by the paper is now a thing of the past.

When developing this formula, a great deal of attention was paid to the magenta. By using a new type of pigment with improved flow characteristics, it was possible to substantially

reduce the magenta's **thixotropy**. Moreover, the series is additive-free and can be combined with UV screenprint and UV offset without any problems.

The excellent price/performance ratio is another added benefit. Although the inks from the preceding 39-6 series cannot be mixed with those from the 39-8 series, they can be printed within the same job, which makes it easier to use up existing stocks of ink. ◆

Thixotropy – the action of certain liquids becoming jelly-like in storage and returning to their liquid condition on stirring or shaking.

HSE Health Safety Environment

Plain Language on the «Benzophenone Case»

In early February, German authorities detected muesli packages that had been printed with a UV lacquer that is expressly not intended for food packaging. Apparently due to set-off in the stack, benzophenone and the derivate 4-methylbenzophenone ended up on the rear of the printed packaging cartons from which point these substances migrated into the muesli through the HDPE inner bag after filling. Benzophenone, 4-methylbenzophenone and other low-molecular photoinitiators are contained in common UV inks, as supplied by the printing ink industry for label printers. These printing inks can be used without any problems for non-food packaging. However, they are not suitable for use on food packaging unless there is a reliable barrier between the printed layer and the content and no set-off can occur. Due to the small size of the molecules in the photoinitiators, there is a pronounced tendency towards migration. Siegwert there-

fore expressly states that these UV inks are not to be used for food packaging. For applications that are sensitive to migration, low migration (LM) ink systems must be used which are based on high-molecular photoinitiators.

For some years the Siegwert range has included LM printing inks for migration-sensitive applications such as food packaging, e.g. UV SICURA FLEX 39-9P SF, UV SICURA PLAST LM, UV SICURA LM 100, UV SICURA LM 250 and a number of UV overprint lacquers.

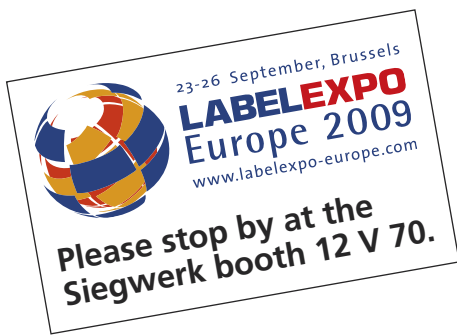
In every instance, the printer respectively the packager is responsible for preventing migration into foodstuffs, preferably through order of migration testing. Siegwert will gladly evaluate your applications on request if you are not absolutely sure about their safety. Please contact your Siegwert application technician for more information.

«Best Supplier Award» for Siegwert Thailand



The Skanem Group is one of the world's largest producers of labels (for food, drinks, pharmaceuticals, cosmetics) and has subsidiaries in Scandinavia, the United Kingdom, Germany, Poland, Russia and Thailand.

The subsidiary in Thailand (near Bangkok) opened in June 2007. It awards a single «Best Supplier» prize for outstanding performance in the areas of quality, service and support. Congratulations to Siegwert (Thailand) Ltd. for receiving this award! ◆



Good to Know

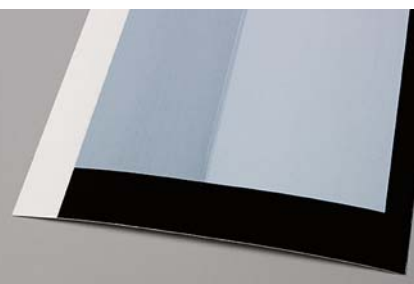
Nanotechnology in Printing Inks?

A nanometre is one billionth of a metre (10^{-9} m). The term nanoparticle generally designates a group of a few thousand atoms or molecules having a total size from 1 to 100 nanometres. To a certain extent, nanotechnical products have been used in the area of printing inks and lacquers for decades. In fact, many pigments and additives such as fine-particle silicon dioxide, titanium dioxide and carbon black fall into this category. As part of the current «nano-hype», these materials have now taken on the «nano» prefix too. What is important to note is that, even though the toxicity of nanoparticles that enter the bloodstream has not yet been ascertained for certain, particles that are mixed into printing ink or lacquer can no longer be released in the form of nanoparticles, thereby guaranteeing that they are harmless. Surface treatment with nanolacquers is commonly referred to with the term **lotus effect**. Here, a nanoscale binding agent with tiny nanoparticles creates a closed surface to which dirt cannot adhere.

Process: UV flexoprint
Product: No-label-look labels

New UV Flexoprint Opaque White

UV SICURA FLEX 39-8
Product No. 81-000173-5



Siegwerk developed this high opacity white based on the new 39-8 series. The aim of this new development was to imitate the opacity of screenprinting. This new opaque white is therefore ideally suited for printing no-label-look labels. It exhibits a high degree of whiteness and does not yellow even when applied in thick layers. This opaque white is also very reactive and can be used at high production speeds. It is silicone-free and can therefore be overprinted with all of the common SICURA UV ink series with good results. ◆

Process: UV flexoprint
Product: Labels, foodstuff primary packaging

New Opaque White for Foodstuff Packaging

UV SICURA 39-9P
Product No. 81-000174-3

This new opaque white is characterised most notably by its high opacity and outstanding printing properties. It can be used without problems in printing processes and sits on the substrate better than other whites. It also tolerates sterilisation and sealing very well. Due to its good characteristics, it is also used for foodstuff primary packaging, e.g. for printing yoghurt covers. ◆



Process: UV letterpress, UV dry offset
Product: Primed plastics

UV Primer for Optimum Adhesion to Plastics

UV primer 85-601608-4 (old number: 806.887)
UV primer 85-601806-4 (old number: 806.885)

Adhesion of UV inks to plastic films and other plastic substrates can leave a lot to be desired. Siegwerk's excellent **UV primers 85-601608-4** and **85-601806-4** are two proven products that guarantee perfect adhesion of UV ink systems that are subsequently applied. These primers are used in UV letterpress or UV dry offset. They are also available in a matte version, which is used frequently in plastic card printing. These UV primers need to be applied in a relatively thin layer that is appropriate for the substrate. The best possible adhesion is achieved if the primer is preprinted inline or the primed substrate undergoes further processing within a maximum of 48 hours. Please speak to your Siegwerk application technician for details. ◆