

UPDATE

News for offset printers · BU Sheetfed · EMEA Edition



Expanded Gamut Printing Certificate for the Siegwerk Group

Marvaco is a Finnish and Swedish prepress company serving printers and brand owners with best available quality and technical advantages. The company employs about 100 prepress professionals in seven sites in Finland and Sweden and is known as the **pioneer in Expanded Gamut Printing technology (EGP)**.

In May 2018, Siegwerk was rewarded by Marvaco with the Partnership Certificate in recognition of introducing new ways to use EGP inks. **With the excellent and proven Nutripack 2 series, Siegwerk reached a really convincing solution for EGP printing in offset on packaging**

cartons. With the low odor and low migration conventional sheetfed Nutripack 2 inks in EGP printing, packages can be made especially colorful while the printing process becomes more flexible and setup times are shortened.

EGP is booming in Europe as packaging printing companies are investing in new printing machines and adopting the EGP technology. **By using EGP, the CMYK color gamut is enriched with OGV inks (Orange, Green, Violet), which more than doubles the number of available color shades compared to the Pantone+ color series.**



Tomi Havia from Marvaco awarding Satu Autio and Jukka Tervakoski from Siegwerk with the EGP certificate.

New high gloss offset metallic series – 369-free

Process: UV offset

Application: Packaging, commercial

Series: SICURA Litho Metal

Product numbers: Rich Gold 71-400068-4,

Rich Pale Gold 71-400070-0, Pale Gold

71-400072-6, Silver 71-400080-9

Brilliance and high curing level, due to new components. SICURA Litho Metal produces a superb metallic effect.

This new UV series of inks «ready to use» is designed for the production of metallic shades. The series is Omnirad-369 free, but also free of EDB and EHA, and the replacement of these photoinitiators has been achieved **without compromise on the reactivity and the printability.** The inks are easy to handle; they are very glossy, offer lovely brilliance and are



characterized by high opacity and excellent coverage. Superior transfer quality and stability are further benefits of this series. Substrates will be all papers and boards as well as a wide range of pretreated materials.

Lend your prints and packaging an enticing appearance with these beautiful gold and silver shades.

New Health and Safety information on EDB, EHA and 4-PBZ

Following the REACH registration, new toxicological data have been issued leading to the reclassification of some photoinitiators usually used in UV inks and varnishes. After the reclassification of the Omnirad 369, there is now concern about the Ethyl 4-(dimethylamino)benzoate (EDB), the 2-Ethylhexyl 4-(dimethylamino)benzoate (EHA) and the 4-Phenylbenzophenone (4-PBZ). These three substances are reclassified as **toxic to reproduction category 1B** and as a direct consequence are now subject to the EuPIA Exclusion Policy.

The recommended substitution period of six months will run until end of **November 2018** for the EDB & EHA and somewhat later for the 4-PBZ.

As usual Siegwerk has taken all necessary action to reformulate inks and varnishes without these raw materials.



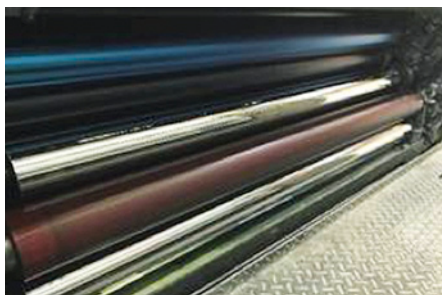
Stability and excellent dot sharpness with AQUALED

Process: UV offset

Application: Fountain solution

Product number: 85-060001-6

This new dampening solution for sheetfed offset machines is especially recommended for low energy and LED UV inks.



Low energy and LED UV inks usually are enriched with photoinitiators and present a quite different water/ink balance than standard UV inks. In addition to the usual properties, the fountain solution **AQUALED significantly improves the printability, ensures high stability as well as excellent dot sharpness** and controlled emulsion. It lowers water surface tension and stabilizes water pH between 4.7 and 5.5.

So, improve your printing results with low energy and LED inks by using the fountain solution AQUALED. You will be delighted.

We are pleased to welcome...



Jordi Estop as new Sales Manager for the Iberian region for both business units Sheetfed and Narrow web. We wish him every success in his new task.
jordi.estop@siegwerk.com

New Siegwerk webshop



<https://onlineshop.siegwerk.com>
Currently valid only for Germany.

The new webshop offers customers an efficient way **to order sheetfed offset inks around the clock**. A clear product categorization allows the customer to quickly find the right ink for his specific application. He also can download relevant data sheets and additional product information. With the use of the new webshop for sheetfed offset inks, Siegwerk wants to bring a service even closer to the customer, while offering color solutions specifically to new customers.

The sheetfed portfolio includes printing inks for all applications in both conventional and UV offset printing: from food packaging to luxury finished cartons, labels for food and non-food applications, through to commercial printing.

The pilot project in Germany will soon be extended to other countries.

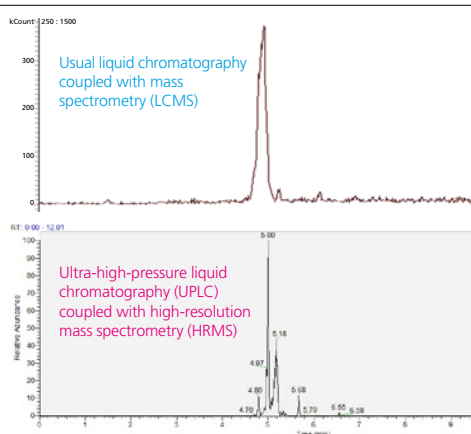
More sensitivity by analytical screening for more food packaging safety

Regarding the migration from materials that come into contact with food, the analytical laboratory in Annemasse/France has developed special methods based on ultra-high-pressure liquid chromatography (UPLC) coupled with high-resolution mass spectrometry (HRMS) to perform migration tests. Indeed, both combined systems allow improved separation and reduce the risk of

false positive results, hence improve the quality of information, and the sensitivity is below ppb level.

Today, the demand is coming from the field of the UV curing technology with the **target to cover compounds which are mixing acrylate monomers, photoinitiators and breakdowns**. And to allow testing in liquid food simulants with again extended sensitivity due to accurate mass spectrometry.

Thereby, a wide range of substances with specific migration limit is already covered by in-house testing to support developments of products at a global level. **The Siegwerk laboratory is now extending the mass spectra databases to achieve comparative screening with printed samples**. This will help to determine migration level of unknown compounds as a complement of available targeted migration analysis, in place for a decade.



Monomer acrylate – Example of high accuracy with the new high-resolution device