UVALUX® UV-Adhesive for Cold Foil Stamping
UVALUX® U0821 / UVAFLEX® U0841

Introduction
Our UV adhesives for cold foil stamping have been developed and optimised together with foil producers. A high quality end product can be economically manufactured with our products and without special equipment.

Substrates
Foils (PE, PP, PVC and others) as well as papers (coated and uncoated).
If the substrate has a closed surface, one can work with considerably reduced film weight of adhesive compared with absorbent materials (uncoated paper).

Printing Process
- Flexo printing: UVAFLEX® U0841
  Cell volume anilox 8-12 ccm
- Offset- / Letterpress: UVALUX® U0821

Properties
- high reactivity
- sharp printing
- intimate contact between foil and substrate

Hints
- store in a cool and dark place
- protect from frost
- close container immediately after use

Excessive film thicknesses of adhesive may lead to squashed edges during lamination resulting in poor print definition.

Foil producers
- LEONHARD KURZ GmbH & Co. KG – Germany: www.kurz.de
- API Group PLC – United Kingdom: www.api-group.co.uk

(The list is not complete and is not a recommendation)

Declaration of Conformity:
Providing handling of our printing inks and a design of the foods packaging in such a way that direct contact of the printing ink with the filling will never take place, we can herewith declare that our printing inks are suitable for regulations (§§ 30 and 31 of law of food stuffs and consumer goods, LMBG*). Please also consider the detailed declaration of conformity of the Union of Printing Ink Industry.
We only use raw material selected according to raw material exclusion list considering dangerous goods guidelines 67/548 EWG and 76/769 EWG for printing inks of the Union of Printing Ink Industry, which offer the highest possible security in use and processing according to the best current practice. The requirements of guideline 2002/95/EG (RoHS guideline) are also met. This includes the regulations regarding limited use of dangerous materials in electric powered and electronic circuit equipment.

Heavy Metals
CONEG-limit of 100ppm as sum value for total content of four heavy metals lead, cadmium, mercury, chromium VI is not only met, but also reduced. DIN EN71-33 regulations pertinent to „safety of toys“ is also fulfilled.

The statements made in this publication are according to our current knowledge. They are intended to inform and advice. No responsibility is accepted. They do not absolve the user from his own responsibility to ascertain that our products are suitable for his process. This publication is subject to influence from the technical process.
Cold Stamping Procedure

Cold stamping is a procedure where a stamping foil is transferred to a substrate by means of a special adhesive. A UV-curing adhesive is printed onto a substrate via a normal printing unit, currently offset or flexo. Then, a stamping foil is laminated onto the substrate and the adhesive is cured through the foil. As a last step, the carrier foil is stripped off, and the remaining stamping foil adheres to the printed parts!

In order to avoid creasing of the foil during production, the distance between printing unit and the stripping operation should not be more than one meter. A shallow strip off angle leads to a better result than a steep angle.

Scheme of cold foil stamping with UV:

The main advantages of the cold stamping procedure are:

- No hot stamping units are required
- Experience in hot stamping is not necessary
- No need for engraved stamping cylinders
- Reduction of costs compared with hot stamping
- Use of standard printing plates
- Economical advantage for short runs
- Passing tolerances can be controlled more easily

Stamping foils with easy detachment enable an optimum transfer, especially with high stamping speeds. A harder detachment enables clearer stamping (especially with fine subjects), however it also increases the risk of an incomplete transfer of the stamping foil.

A poor printing quality of the cold stamping adhesive directly causes a poor stamping result.