ZELLER+GMELIN

TECHNICAL INFORMATION

UVALUX® UL-8CY31 Coldfoil Adhesive

Coldfoil Adhesive for UV Offset and UV Letterpress, yellow tinted

CHARACTERISTICS

With the UVALUX® UL-8CY31 Coldfoil Adhesive we present a UV curing adhesive, especially for printing of labels and packaging in offset- or letterpress printing. UVALUX® UL-8CY31 is yellow dyed.

TECHNICAL PROPERTIES

Substrate	Film, Paper Plastic Coated, Paper Coated
Printing Process	Offset Sheet-Fed, Offset Web-Fed, Letterpress
Press Performance	Sharply Printed Edges, Good Ink-Water-Balance, High Reactivity
Surface Properties	Adhesion Optimized, Tinted
Application	Folded Box, Flexible Packaging, Self Adhesive Labels
Market	Labels, Packaging

PACKAGING UNITS

+ 2,5 kg plastic can (black)
+ 1 kg plastic can (black)

STORAGE STABILITY

Optimal storage conditions:
The optimal storage temperature is 20°C. Higher storage temperatures reduce the shelf-life.

+ protect from frost
+ store in a cool and dark place
+ stir or shake well before use
+ can should be closed immediately after usage

Warranty:
If the products are stored properly, we warranty the product performance for a shelf life of 12 months from the date of delivery. Deviating from this, we warranty only 6 months product performance for all deliveries in large containers over 10kg filling quantity.

APPLICATION REMARKS

Process description coldfoiling
Cold foiling is procedure where a foil is transferred to a substrate by means of a special adhesive. A UV-curing adhesive is printed using a regular printing unit. Then the foil is laminated onto the substrate. The foil image remains only where the adhesive has been printed. Excess foil is stripped off with the carrier material.
The foil must be suitable for the application, so the adhesive can be cured through the foil (UV transmissible).
Suitable printing inks for overprinting the applied foil: UVALUX® U70

Printing Materials
We recommend using ester and ketone resistant rollers (EPDM-material). The inking roller, rubber blanket and printing plate have to be resistant against UV-inks and UV-detergents (see manufacturer's instructions).

Adhesive lay-down
If too much glue is applied it could be squeezed outside the image area during application of the foil. This would result in poor print definition and edges which are not sharp. In extreme cases even the carrier film can be torn apart. Insufficient glue application would lead to poor removal of the metallised layer from the carrier film resulting in a patchy print.
Running the adhesive on a cold machine can lead to sensitive troubles because of the adhesive´s high tack. Therefore make sure to apply the adhesive always on an operationally warm machine.

Control of the adhesive
The adhesive is dyed, facilitating the control of even film weights by visual examination or more accurately using a densitometer.
Examples for density values: 0,60-0,65 measured with yellow filter

The indicated values refer to prints on standard coated paper „Norm Kunstdruckpapier Apco 2/2” and shall only give a reference value. The type of substrate has a significant influence on the density values. Therefore other printing materials may show considerably different density readings.

Fountain Solution
Approved fountain solution parameters:
a) ph-value: 4,8 - 5,2
b) Water hardness: 9 - 12° dH
We recommend the use of temperature controlled ink ducts and fountain solution.

Foil Characteristics
Foils with easy release from the carrier film enable optimum transfer, especially with high press speeds. They are ideal for use on full coverage designs. Foils with lower release properties from the carrier film (more firmly attached, harder to remove) enable sharper foiling, especially with fine lines and halftone work. However there is an increased risk of incomplete foil transfer.

Preliminary Tests Recommended
Before beginning to print we recommend practice oriented pretests on your substrate, in order to test the desired characteristics of the finished product.

PRINTING AIDS

W963 UV Wash Up with Lemon Smell
W936 UV Wash Up without Lemon Smell
Suitable for cleaning inking systems, sleeves, plates, blankets, etc.
Not approved for automatic washing units.
Before starting printing, the washing agent must be completely dried off, otherwise the printing behaviour may be impaired.

Remark:
The addition of any additive might change the overall characteristics of the printing ink.

MISCELLANEOUS

UVALUX® UL-8CY31 replaces the predecessor product U0830

Availlable Variants
UVALUX® UL-8CY31: Yellow dyed
UVALUX® UL-8CK31: Grey dyed
UVALUX® UL-8CT31: Transparent (not dyed)

LABELING

Marking according to EC legislation:
Our inks are classified and marked according to EC legislation and the German “Gefahrstoffverordnung” (German dangerous substances regulation).
The material safety data sheet (MSDS) is available on request.

REMARKS ON COMPOSITION AND REGULATION

The UVALUX® UL-8CY31 Coldfoil Adhesive has no special FCM formulation. Therefore we recommend for food packaging FCM ink series and lacquers which are availlable for many applications.

General Requirements

The UVALUX® UL-8CY31 Coldfoil Adhesive meets the following general requirements:

+ EuPIA Charter on Raw Material Selection and Exclusion for Printing Inks and Related Products (former EuPIA Exclusion Policy)
+ Heavy metal limits laid down in the European packaging and packaging waste regulation (EU) 2025/40 (replacing directive 94/62/EC) and TPCH (former CONEG).
+ Directive 2002/95/EC (RoHS), Directive 2011/65/EU and Directive 2015/863/EU (RoHS 2).
+ Formulated without the photoinitiators ITX, 369, TPO, 379 or Benzophenone.
+ No raw materials are used which are classified as CMR 1A & 1B, PBT (PBT pollutants are chemicals that are toxic, persist in the environment and bioaccumulate in food chains), vPvB (Substances that are potentially very persistent and very bioaccumulative) or endocrine disruptors (hormonally active agents).
+ We avoid the use of SVHC substances. Unfortunately the reclassification of a substance may result in the presence of SHVC substances in our formulations at concentrations >0.1wt%. Such rare cases are clearly highlighted in our material safety data sheets.

DIN EN ISO certification
The production site of Zeller+Gmelin / Germany is certified according to DIN EN ISO 9001:2015 and DIN EN ISO 14001:2015.

The information contained in this document (the "product specification") is based on our current knowledge. It does not exempt the processor or user from carrying out their own tests. Properties of the product that go beyond the above information and/or suitability for a specific purpose cannot be derived from the product specification and are not owed. Any existing statutory provisions and regulations concerning the handling and use of the products must be observed by the processor or user of our products. We expressly point out that the owed quality of our product is measured exclusively on the basis of the properties warranted in this document; the fulfillment of additional statutory objective quality requirements is not owed. By ordering our product without objection and with knowledge of this product specification, you hereby declare your agreement.

EXPERTLY DONE.

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