



ZELLER+GMELIN

Preparation for the future

SBU Rigid Plastic

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EXPERTLY DONE.



ZELLER+GMELIN

Rigid Plastic

UVACurid® PrimeCup FCM

C81

SVHC background information

23.01.24: A raw material of C81 was added to the SVHC candidates list



The screenshot shows the ECHA website interface. At the top, there is a navigation bar with the ECHA logo and links for 'About Us', 'News', 'Contact', and 'Jobs'. A search bar is also present. Below the navigation bar, there are four main menu items: 'LEGISLATION', 'CONSULTATIONS', 'SEARCH FOR CHEMICALS', and 'SUPPORT'. The 'SEARCH FOR CHEMICALS' menu item is highlighted. Below the navigation bar, the breadcrumb trail reads 'ECHA > Search for chemicals > Candidate List'. The main content area is titled 'Candidate List of substances of very high concern for Authorisation' and includes a note that it was published in accordance with Article 59(10) of the REACH Regulation. There are two columns of text: 'Notes' on the left and 'FURTHER INFORMATION' on the right. The 'Notes' section contains three bullet points: 'Authentic version', 'Numerical identifiers', and 'Other numerical identifiers'. The 'FURTHER INFORMATION' section contains three bullet points: 'More information about Candidate list of Substances of Very High Concern for Authorisation', 'Data on Candidate List substances in articles', and 'Reason for inclusion'.

Legal implications:

- + No restriction or ban
- + Reporting obligation through safety data sheet
- + Reporting obligation for the final article if $>0.1\%$
- + Concentration in the final article typically $<0.1\%$
 - ⇒ no reporting obligation

BUT:

- + Many brand owners dislike/ban SVHCs

Update of C81



Latest developments

- + Development of a new version
- + Substitution of the SVHC raw material and keep the current press performance
- + expected to be available for customers from Q3/2024

New products need new inks



Latest developments

- + Market requirements changed
- + More ultra heat treated milk-based products with a longer minimum shelf life
- + Request for test conditions for migration analyses that cover the changed storage time
 - + 10 days stored in a staple at 40°C
 - + 10 days stored fully filled with ethanol at 60°C

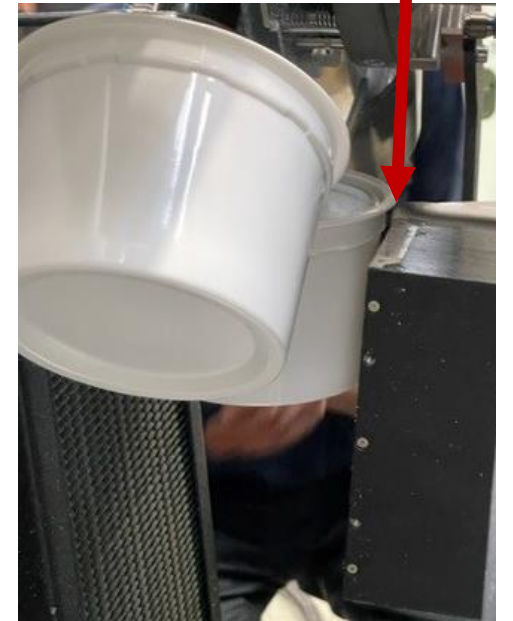
UVACurid® PrimeCup LED FCM

C581

UV LED Ink for Plastic Cups

Development Status

- + Partners: Polytype (CH) + Greiner (AU)
- + LED UV Curing System Phoseon
- + Type: FL440, 16W/cm²
- + Wide window 25mm, longer exposure, high total UV dose
- + No edge on lamp → short distance to cup (2mm)
- + Print Speed aim 700 cups, current max. 700 cups



UV LED Ink for Plastic Cups

Current trials

- + On PP cups
- + Colours: Yellow, Blue, Red, Black under development
- + Scratch resistance ok, close to reach adhesion target

Further steps

- + Test of the dual curability
- + Development of the base inks for mixing
- + End of 2024 start of customer trials



UVACurid® PrimeTube LED FCM

T581

UV LED Ink for Plastic Tubes

Development status

- + First trial: Linhard (DE)
- + LED UV Curing System UVTerno
 - + Type: EVO H+ LED 15W/cm²
 - + Flame pretreatment
- + Print Speed aim 200 tubes, current max. 80 tubes

Further steps

- + Development of Cyan and Magenta
- + Test of the dual curability



Substitution of the SVHC raw material

Further processes

- + UVARolid UV
- + UVARolid UK
 - + Revision of both series
 - + Target Q3/Q4



**If you have testing options at your customers,
please contact us!**



Container Decoration Manual



**available as PDF
and e-book (.epub)**



**Thank you
for your attention!**