

UV-Flexo Plus Low-M

The UV radically curing Flexo Plus Low-M printing inks are universal flexo inks for outer food packaging printing with indirect contact.

Characteristics

- Very high gloss
- Good adhesion
- Very low odour

Process UV-Flexo Plus Low-M

	Article code	Light	Alcohol	Solvent	Alkali	Opacity
Process Yellow	04FUVFCLM01Y.5	5	+	+	+	TR
Process Magenta	04FUVFCLM01M.5	5	+	+	-	TR
Process Cyan	04FUVFCLM01C.5	8	+	+	+	TR
Process Black	04FUVFCLM01K.5	8	+	+	+	TR
Process Yellow RST LF	04FUVFCLM01YF7.5	7	+	+	+	TR
Process Magenta RST LF7	04FUVFCLM01MF7.5	7	+	+	+	TR
Process Magenta RST	04FUVFCLM01MR.5	5	+	+	+	TR

Resistances according to DIN ISO 2836 light fastness to DIN ISO 12040 + Properties given, - Properties not given

Light WS 8 = Excellent 1 = Poor

Substrates

- PVC, PE, PP, oPP, PET, PS, aluminium film
- coated and uncoated paper and board

Due to the variety of materials prior tests of printability and properties are recommended as well as in-line corona pre-treatment for films. A surface tension of approximately 40 mN/m is suggested.

For an assessment of the substrate as a migration barrier, please contact AtéCé Graphic products.

Processing instructions

Stir the inks well before use.

Good curing depends on ink application, substrate, number and type of emitters used, their distance to the print and printing speed. For standard ink application we recommend a lamp output of 160 - 200 W/cm.

Print subject	Ink application g/m ²	Cell volume ml/m ²
Process printing	0,9 - 1,4	3,0 - 4,5
Screen - fine	0,9 - 1,0	2,8 - 3,5
Screen - coarse	1,2 - 1,5	3,0 - 6,0
Lines - fine	1,0 - 1,5	2,8 - 4,0
Lines - coarse	1,5 - 2,0	3,5 - 6,0
Areas	1,5 - 2,5	4,0 - 8,0

All types of anilox rollers can be used when using Flexo UV printing inks LMI. Depending on the printed image, screen resolutions of 60 to 400 lines/cm and even more can be printed. Due to a high pigmentation of the inks, the brilliance is preserved, even when printing with very high screen resolutions.

Depending on the shade, the optimum ink application is between 0,8 and 2,0 g/m². The table above shows the recommendation for cell volumes for different print subjects.

Pantone UV-Flexo Plus Low-M

	Article code	Light	Alcohol	Solvent	Alkali	Opacity
Pantone Yellow	04FUP0710.5	5	+	+	+	TR
Pantone Yellow 012	04FUP0711.5	5	+	+	+	TR
Pantone Orange 021	04FUP0720.5	3	+	+	+	TR
Pantone Warm Red	04FUP0731.5	3	+	+	-	TR
Pantone Red 032	04FUP0733.5	6	+	-	+	TR
Pantone Rubine Red	04FUP0734.5	5	+	+	-	TR
Pantone Rhodamine Red RST ¹⁾	04FUP0737.5	7	+	+	+	TR
Pantone Purple RST ¹⁾	04FUP0740.5	7	+	+	+	TR
Pantone Violet RST ¹⁾	04FUP0741.5	7	+	+	+	TR
Pantone Blue 072	04FUP0750.5	7	+	+	+	TR
Pantone Reflex Blue RST ¹⁾	04FUP0753.5	7	+	+	+	TR
Pantone Process Blue	04FUP0755.5	7	+	+	+	TR
Pantone Green	04FUP0760.5	7	+	+	+	O
Basic Mixing Black	04FUP0770.5	7	+	-	+	TR
Pantone Transparant White	04FUP0700.5	n/a	n/a	n/a	n/a	TR
Basic Orange RST LF7	04FUP0722.5	7	+	+	+	TR
Basic Warm Red RST LF7	04FUP0732.5	7	+	+	+	TR
Basic Rubine Red LF7	04FUP0735.5	7	+	-	+	TR
PMS Opaque White - standard -	04FUW0700.5	8	+	+	+	O
Ultra Opaque White - covering white -	04FUW0710.5	8	+	-	+	O
Pharma Ultra Opaque White -	04FUW0715.5	8	+	-	+	O
- covering white pre-treated alu-film -						
Inmould Opaque White	04FUW0740.5	8	+	+	+	O

Resistances according to DIN ISO 2836 light fastness to DIN ISO 12040 + Properties given, - Properties not given

1) Due to the necessary resistances to various filling materials, not all shades can be achieved in the accustomed quality

Licht WS 8 = Excellent 1 = Poor

Rotary viscosity (standards at 25°C, shear rate 160/s):

- 0.4 - 1.0 Pa*s

Further processing

After complete curing, the print can be further processed immediately.

The inks are UV-varnishable caused by their chosen fastnesses. They are also laminatable and suitable for thermal transfer printing.

The sealing strength of the inks on PE is at least 170 °C for 0.5 s at 3 bar (plane jaw, one-side tempered).

Field of application

The inks mentioned above are recommended for the production of food- and pharmaceutical packaging. These inks are formulated to minimise potential migration. Migration can occur through the substrate or by set-off. During set-off migration the ink components shift from the printed outer side to the unprinted food-contact surface in the stack or the reel. Note that each migration is also dependent on the processing conditions and sufficient barrier properties of the substrate.

These inks are only suitable for indirect food contact.

The inks are generally suitable for the packaging of following food substances:

- All kind of odour- and taste-sensitive food
- Solid, paste-like or liquid, greasy or aqueous food

Excluded applications

The inks mentioned above are not permitted for direct food contact.

The use of these inks in food packaging with special requirements e.g. for microwave, baking oven or baby food, must be tested prior to application.

Storage

Product should be stored cool, dry and in a dark place.

Packaging size

- 5 kg plastic cans
- 200 kg barrel
- 1000 kg container

This technical instruction sheet is designed for your information and reference. It is based on and conforms to our current knowledge. However as actual application is affected by many factors over which we have no control, we are not liable for printing failures.