

UV-Flexo Plus Low-M

The UV radically curing process inks are universal inks for offset printing on film-based food packagings, which cure under LED radiation due to their special composition.

Characteristics

- Very good adhesion
- Very good ink-water-balance

Substrates

PVC, PE, PP, OPP, PET, PS

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

For an assessment of the substrate as a migration barrier, please check with AtéCé.

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

LF denotes full strength, lightfastness of tints will be reduced 8 = Excellent 1 = Poor

Intended applications

The above-mentioned inks are used in sheetfed and web offset printing, flexible packagings and low migration for films, shrink films, in-mould-labels, placemats and packaging printing, for example.

Processing instructions

Experience has shown that the optimum pH value of the fount solution is in the range of 4.8 to 5.3.

Depending on other fount solution additives, the value must be set individually.

Good curing depends on ink application, substrate, number and type of emitters used, their distance to the print and printing speed. We recommend an ink application of 1.0 - 1.5 g/m².

Technical data

The system is particularly suitable for printing on temperature-sensitive substrates. UV LED inks can also be used with conventional UV curing systems. We recommend a wavelength of the UV LED lamps of 385 or 395 nm.

Rotational viscosity (usual val. at 25°C, shear rate 160/s):

- 25 - 32 Pa*s

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

LF denotes full strength, lightfastness of tints will be reduced 8 = Excellent 1 = Poor

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.

Field of application

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

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

Excluded applications

The inks mentioned above are not suitable 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.

Please also note the regulatory requirements of the respective target market.

Storage

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

Packaging size

- 2.5 kg plastic cans
- 200 kg barrel

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.