UV Flexo

For absorbing and non-absorbing printing substrates

The **UV Flexo** process series stands out for its excellent printing properties and shows outstanding adhesion on a big range of non-absorbing printing substrates such as foil, plastic (Polypropylene, PVC, Polyester and metallized papers. Other fields of application of this series are coated and uncoated boards and papers.
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 approx. 40 mN/m is suggested.

Properties:

- **Good gloss**
- **Good adhesion**
- **Low yellowing**

		Light	Transp.	Spirit	Nitro	Alkali
UV Flexo	Yellow	5	+	+	+	+
UV Flexo	Magenta	5	+	+	+	-
UV Flexo	Cyan	8	+	+	+	+
UV Flexo	Black	8	-	+	+	+
UV Flexo	Yellow Lightfast	7	+	+	+	+
UV Flexo	Magenta Lightfast	7	+	+	+	+

+ Properties given, - Properties not given

Important note of usage:

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 an ink application of 1.0 - 1.5 g/m2 we recommend a lamp output of 160 - 200 W/cm. All types of anilox rollers can be used when using **UV Flexo** printing inks.
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 following table shows the recommendation for cell volumes for different print subjects. However, it must be chosen according to geometry, gloss and machine speed.

The table below shows the recommendation for cell volumes for different print subjects.

Print subject	Ink application g/m²	Cell volume ml/m²
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

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

- Process Inks: 0.4 - 1 Pa*s
- Basic inks: 0.4 - 1 Pa*s

Further processing
After complete curing, the print can be further processed immediately. The UV Flexo inks are UV-varnishable caused by their chosen fastnesses.
They are also laminatable and suitable for stamping and thermal transfer printing.

Packaging size:

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

Storage:
UV inks have a limited shelf life. In case of appropriate storage at 20 °C and protected from direct sunlight, we guarantee a shelf life of 6 months.

	Light WS acc. DIN 16525	Transparent / Opaque	Spirit	Solvents	Alkali
UV Flexo PANTONE® Yellow	5	T	+	+	+
UV Flexo PANTONE® Yellow 012	5	T	+	+	+
UV Flexo PANTONE® Orange 021	3	T	+	+	+
UV Flexo PANTONE® Warm Red	3	T	+	+	-
UV Flexo PANTONE® Red 032	6	T	+	-	+
UV Flexo PANTONE® Rubine Red	5	T	+	+	-
UV Flexo PANTONE® Rhodamine Red fast 1)	7	T	+	+	+
UV Flexo PANTONE® Purple fast 1)	7	T	+	+	+
UV Flexo PANTONE® Violet fast 1)	7	T	+	+	+
UV Flexo PANTONE® Blue 072	7	T	+	+	+
UV Flexo PANTONE® Reflex Blue fast 1)	7	T	+	+	+
UV Flexo PANTONE® Process Blue	8	T	+	+	+
UV Flexo PANTONE® Green	8	T	+	+	+
UV Flexo Black	8	O	+	+	+
UV Flexo Transparent White		T			
UV Flexo Opaque White	8	O	+	+	+
UV Flexo Yellow fast	7	T	+	+	+
UV Flexo Orange fast	7	T	+	+	+
UV Flexo Warm Red fast	7	T	+	+	+
UV Flexo Rubine Red fast	7	T	+	+	+
UV Flexo Rhodamine 032 fast	7	T	+	+	+

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

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.