III RUCOINX

INXFLEX™ UV Euro II

Technical Data Sheet

Flexo printing inks

1. APPLICATION FIELDS:

INXFlex™ UV Euro II inks have been formulated to provide minimal plate swell for flexographic printing on most tags & labels, pressure sensitive, as well as in-mold labels applications.

Substrates:

- Paper
- PE and PP
- PVC

Adhesion should always be checked when printing on substrates prior to use.

2. CHARACTERISTICS:

- · High pigmentation
- Low viscosity
- · Good rheology providing excellent ink duct behaviour
- Cure with press speeds up to 150 m/min (dependent on lamp intensity)
- Good adhesion to a wide variety of synthetic substrates¹
- Compatible for combination printing (hot foil stamping, rotary screen)
- · Excellent hold out and gloss on paper stocks
- Minimal plate swell in regards to all plate making technologies including digital and fast curing photopolymers

INXFlex™ UV Euro II inks have not been formulated for food packaging application.

They can be used in such application only if the final article has been designed to ensure functional barrier properties and if set-off can be excluded.

In case compliance to the Guidance note Nestlé and/or Swiss Ordinance is requested, we recommend using dedicated $INXFlex^{TM}$ UV FPC series.

¹Adhesion should always be checked when printing on substrates prior to use.

3. RANGE OF COLOURS:

Process-Cyan	1631692
Process-Magenta	1631693
Process-Yellow	1631694
Process-Black	1631695

4. ADDITIVES:

The **INXFlex**™ **UV Euro II** inks are ready to use.

5. VISCOSITY:

INXFLEX UV Euro II inks are a low viscosity system that can be printed with aniloxes up to 450 l/cm screen with $2.0 - 4.5 \text{ cm}^3/\text{m}^2 \text{ volume}$.

400 - 700 cPs @ 25°C

Measured with a Brookfield CAP Viscometer, spindle #4 at 900 rpm

6. PIGMENT RESISTANCE CHART:

	(1) Light Fastness	Alcohol	Solvent	Acid	Alkali
Process Cyan	5	+++	+++	+++	+++
Process Magenta	5	+	++	+	++
Process Yellow	7- 8	+	++	+++	+++
Process Black	7- 8	++	++	+++	+++

(2) Bleed Resistance (data from suppliers)

Key:	+++ Excellent	++ Good	+ Average
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Remarks:

(1) Light fastness given for full tone (Blue Wool Scale)

(2) Data on resistance are transmitted in good faith and to the best of our knowledge. They do not absolve the user from performing all necessary validation tests before any industrial realization.

7. PROCESSING INSTRUCTIONS:

7.1 PRE-TREATMENT:

We recommend a corona pre-treatment of at least 38 – 44 mN/cm.

7.2 RECOMMENDED ANILOX ROLLER CONFIGURATIONS:

Parameters	Process Work	Line Work
Line/cm	350 – 450	180 – 195
Volume cm ³ /m ²	2.0 – 4.5	4.2 – 8.5

INXFLEX™ UV Euro II

7.3 PRINTING EQUPIMENT:

INXFlex™ UV Euro II ink series is suitable for all commonly used UV flexo printing machines.

Ink series INXFlex™ UV Euro II can be printed with all printing plate types developed for the usage of free radical curing UV inks.

The inks should be stirred well before use.

8. CURING CONDITIONS:

Adequate UV curing is required for this system. Cure speeds will be dependent upon film thickness, substrates and the type/condition of the UV curing equipment.

Suitable for medium pressure mercury lamps with 120 - 200 W/cm. The optimum energy output is 70 - 100 Millijoule/cm², measured by Kühnast-Integrator under lab condition. INXFlex™ UV Euro II has good curing properties and is suitable for a printing speed up to 150 m/min depending on the colour shade, UV lamp configuration, ink colour, anilox roller and transferred film weight.

The cleaning cycles of the reflectors and the position time of the UV lamps described by the machine manufacturer should always be observed.

9. CLEANING:

We recommend the below products:

Anilox and machine cleaner 34622 Printing plate cleaner 35352

The advice given by the printing plate manufacturers regarding the cleaning of the printing plate should always be observed.

If cleaning is not performed by fully automatic cleaning equipment, personal safety regulations must be followed.

10. SHELF LIFE:

For maximum shelf life (12 months from date of manufacture), closed containers should not be stored at temperatures in excess of 25°C.

Shelf life is reduced to 6 months for products marked with (3) in the Designation Table.

Containers should be resealed promptly after use

Prolonged exposure to sunlight should be avoided.

Surplus ink from duct should never be returned to original containers.

11. PACKAGING:

- 5 kg pails
- 200 kg drum
- 1000 kg IBC

12. PRECAUTIONS:

UV inks may cause irritations and can increase the sensitivity of the skin, possibly leading to hypersensitivity. Therefore, the use of disposable gloves and protective goggles is strongly recommended.

For further information on the safety, storage and environmental aspects concerning these products please refer to the Material Safety Data Sheet (MSDS).

Additional technical information may be obtained from our staff of the Product Management Department.

A. M. RAMP & Co. GmbH RUCOINX Printing Inks Lorsbacher Straße 28 65817 Eppstein/Ts. Germany

Phone: +49 (0) 6198-304-0 Fax: +49 (0) 6198-304-287 E-Mail: info.de@inxeurpe.com

www.ruco-inks.com www.inxeurope.com

