

## IPICURE FX 6000

Universal UV Inks for Flexo Printing on Plastics and Paper

**IPICURE FX 6000** is the new high quality series for flexo printing on plastics and paper. Low odour and highly concentrated series, it helps to reduce anilox scoop volumes and to optimize printing definition. Specially suited for flexographic narrow web presses equipped with traditional UV curing units. Good flow properties allow to use this series with both open ink ducts or doctor blade chambered ducts. Available in the colour scheme all Process Set, Colour Bases (Pantone®) Opaque White and Spot colours on request.

### Properties

We recommend the **IPICURE FX 6000** series for standard applications with the following properties:

- Good adhesion on many different substrates
- Fast curing
- Low odour
- High gloss
- Excellent floating on adsorbent substrates
- Very low “Curling” tendency
- High colour density
- Stable viscosity and very good flow and printability
- Good chemical and mechanical resistances.
- Suitable for overvarnishing, laser printing, hotfoiling and coldfoil stamping (test is required)

### Substrates

The **IPICURE FX 6000** series is mainly suitable for:

- Coated and uncoated papers
- Metallized papers
- Top-coated substrates.
- Thermal papers (test is required).
- PE, PP, PET, OPS, PVC.

Considering the many different quality of plastic substrates available, please refer to the following table with suggested treatment levels (dynes/cm):

	PE	PP	PVC	PET	PS	PVDC	PU	ABS	PTFE	Silic.
Min.	42	40	36	44	42	42	38	42	38	38
Max	54	50	52	56	50	52	52	52	52	52

In case peculiar substrates or specific adhesion performance are required, we recommend that proper and specific tests were carried out before printing run.

## Application

### Printing Presses

The **IPICURE FX 6000** series is suitable for flexographic printing machines equipped with positive, negative and chambered Doctor Blades inks systems.

### Recommended application parameters

Parameters	PROCESS	PANTONE ®	AREA
<i>ANILOX (Lines/cm)</i>	300-500	160-180	120-180
<i>ANILOX (Lines/inch)</i>	760-1270	400-460	300-460
<i>Pick-up volume (cm<sup>3</sup>/m<sup>2</sup>)</i>	2-4	5-6	5-10
<i>Angle</i>	60°	60°	60°
<i>Application rate (g/m<sup>2</sup>)</i>	0,6-1,4	1,6-2,0	1,6-3,0

### Printing Plates

In general, this series is suitable for rubber and photopolymer plates. For printing with UV flexo inks, plates with about 70 Shore of hardness are recommended. For good quality printing and lasting printing performance of plates, specifically developed for UV inks plates are suggested.

### UV Curing and printing speed

**IPICURE FX 6000** series is suitable for medium and high-pressure UV systems:

Lamps power: **120-200 W/cm**.

Printing Speed: Up to **150 m/min**.

In general, the maximum printing speed, in order to obtain a consistent curing result, it is strongly related to many parameters such as:

- Set-up and power of UV lamps.
- Anilox rollers utilized.
- Applied inks quantity.
- Colour and density of the printed inks.

Considering the good mechanical resistance of the cured ink layers, on coated papers no varnish protection is required, however in case of special substrates or in more demanding applications, we recommend to use suitable UV varnish in order to provide higher protection for the printed substrates.

Please consider that highly absorbent stocks can significantly reduce the curing speed and the surface properties.

## Food packaging

The statements listed on this technical information sheet are according to our best knowledge. The statements do not exonerate the user from their own responsibility to determine that our products are suitable for their processes. They are intended to inform and advise and are subject to influence from the technical process. This edition of January, 2020 replaces all previous editions. With the present edition all older editions are null and void.

The products listed above are not suitable for printing primary food packaging. More information concerning the subject of packaging (food, cosmetics, etc.) can be found on the webpage of the European Printing Ink Association: [www.eupia.org](http://www.eupia.org).

## Color Gamut and Fastness Properties

### Fastness: Light, Alcohol, Solvents e Alkali

Process Set		Light Fastness	Alcohol	Nitro	Alkali
Yellow	6GI-6000-0001	5	+	+	+
Magenta	6RS-6000-0001	5	+	+	-
Cyan	6BL-6000-0001	8	+	+	+
Black	6NE-6000-0001	8	+	+	+
Dense Black	6NE-6000-0055	8	+	+	+
Process Colours LF		Light Fastness	Alcohol	Nitro	Alkali
Yellow LF	6GI-6600-0003	7	+	+	+
Magenta LF	6RS-6600-0103	7	+	+	+
Colori Base		Light Fastness	Alcohol	Nitro	Alkali
Yellow	6GI-6600-0002	5	+	+	+
Orange (021)	6AR-6600-0021	5	+	+	+
Orange LF	6AR-6600-0121	7	+	+	+
Warm Red	6RS-6600-0002	3	+	+	-
Y.Shade Red (032)	6RS-6600-0032	5	+	-	+
Rubine Red	6RS-6600-0003	5	+	+	-
Rhodamine Red LF	6RS-6600-0104	8	+	+	+
Purple LF	6PU-6600-0101	8	+	+	+
Violet LF	6VI-6600-0101	8	+	+	+
Reflex Blue LF	6BL-6600-0102	8	+	+	+
Blue	6BL-6600-0002	8	+	+	+
Green	6VE-6600-0001	8	+	+	+
Mixing Black	6NE-6600-0002	8	+	+	+
Transparent White	6TW-6600-0000	NA	NA	NA	NA
Opaque White	6BI-6000-0001	8	NA	NA	NA
		Light fastness based on standard ISO 12040: 1 (low) 8 (high)	Defined on standard ISO 2836: +: Resistance granted -: Resistance not granted		

\*The assessment of the color properties was made under standardized printing conditions. In individual cases, under special conditions, as in printing with very high ink densities, the classification of certain properties may be different.

## Printing Auxiliaries

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The IPICURE FX 6000 inks are ready to use products. In case small adjustments are needed for special requirements, please find the recommended additives and technical information on the table below:

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IPICURE FX 6000 Press Room add.		Usage	Dosage
Thinner	6AD-6000-0000	Suggested usage to reduce viscosity of the inks during printing run	Up to.10%
Levelling Agent	6AD-6000-0003	Suggested usage to improve levelling and wettability of the inks during printing run	Up to 0,5%
Anti-foam	6AD-6000-0001	Suggested usage to reduce foam and micro-bubbles into the inks during printing run	Up to 0,2%
Catalyst	6AD-6000-0002	Suggested usage to enhance curing speed	Up to 5%

### Shelf life

12 months from the production date if the container is not opened. Store between 5 - 35°C. Higher storage temperature may reduce shelf life. Protect from frost and sunlight. The cans need to be closed back immediately after usage.

### Packaging

5 kg plastic bucket