FlintGroup
Narrow Web

Flexocure ANCORA™

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Rev: 5

Flexocure ANCORA™

- **is a UV curing flexo ink formulated for low migration demands in labels and flexible packaging applications**
- **is recommended for printing on a wide range of synthetic materials as well as on most paper substrates**
- **combines excellent press performance with high printing speeds, very good adhesion and very good scratch**
- **is available in 4 colour process set, Pantone® basic shades, opaque white and high resistant basic shades**

Application areas

Flexocure ANCORA™ is developed for labels and packaging applications, where low migration is a demand together with other attributes, good cure speed and adhesion.

Technical specifications

Printing presses

Flexocure ANCORA™ will work on narrow and mid web flexo presses, provided they fulfil the conditions mentioned in this data sheet.

Printing conditions

The following parameters are recommended when printing with Flexocure ANCORA™:

Parameter		Pantone®	Solids	Process
Anilox (metric)	Lines/cm	160-180	120-180	300-400
	Vol cm^3/m^2	5-6	5-10*	3-4
Approx film weight (g/m^2)		1,6-1,8	1,6-3,0	0,6-0,9
UV Lamp	W/cm	160	160	160
Print speed	m/min	150	150	150

*only suitable for opaque white, due to its density

Many other factors can affect the final printed result. We always recommend to finger print any new designs or presses to determine the conditions required before starting commercial runs with Flexocure ANCORA™.

For recommendations of plates, tapes and UV lamps please refer to our UV flexo printing advice Technote.

Physical properties

Flexocure ANCORA™ is available press ready, combining easy handling with optimum press and print performance.

Shelf life

Flexocure ANCORA™ has a 12-month shelf life guarantee. This guarantee covers 12 months from the date of manufacture (manufacture date is found on label).
It is important to stir Flexocure ANCORA™ before use to ensure product homogeneity.
For further details, see Health, Safety and handling.

Combination printing

Flexocure ANCORA™ is suitable for printing in combination with any other Flint Group Narrow Web product.
It should me noted that if low migration characteristics are to be maintained it should only be used in combination with other low migration inks.
Depending on the print order and product chosen, the use of additives may be required for an optimum result. Please refer to page 3 for details.

For best combination printing results, the following Flint Group Narrow Web products should be used:

- UV Offset — Lithocure ANCORA™
- UV Flexo varnish — YVF00100 GP Gloss, YVF00107 Matt, YVF00112 TTR Gloss

For further technical information, please refer to the individual, product-related Technical data sheet.

Variable Information Printing (VIP)

Flexocure ANCORA™ is suitable for use in most VIP applications. Due to the wide range of materials in use, we recommend to speak with your local Flint Group Narrow Web technical contact for specific recommendations.

The printing conditions used with Flexocure ANCORA™ may also affect the acceptance of VIP. We recommend testing specific combinations before starting the print run. In some applications, best results are obtained when a suitable varnish is applied.

We do not recommended to use opaque white, metallic or fluorescent inks or products containing matting agents in combination with thermal printing, as these can cause excessive wear to the print head.

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Materials recommendations
Flexocure ANCORA™ is tested and found to be suitable on a wide range of materials including:

- Polyethylene (PE)
- Top Coated PE
- Polypropylene (PP)
- Top Coated PP
- Acrylic Coated BOPP
- PET
- PVdC Coated BOPP
- BOPP (in mould)
- PVC
- Alumium foil
-

For most synthetic materials, a surface energy of 38-45 dyne/cm is required to achieve good adhesion. Corona treatment in line is recommended for best results.
Due to the variation between material types from different suppliers, we recommend to follow any specific recommendations from your supplier. We further suggest to always test new materials before starting a new design.

Resistance properties
Flexocure ANCORA™ will obtain optimal resistance properties 24 hours after printing, assuming correct cure conditions have been followed.

Full details of resistance properties for each product are shown on page 4.
In each scenario, the following test methods have been used:

- Lightfastness	ISO 12040:1997
- Solvent, Soap, Grease, Alkaline	ISO 2836:2004

Lightfastness figures and all resistance properties are based on the supplier information for each of the pigments used as well as experience from internal standardized tests.

Where lightfast shades are required, we recommend using Flexocure ANCORA™ High Resistant shades.

General

Flexocure ANCORA™
- is formulated with low migration components
- does not contain substances listed on the EuPIA exclusion list.
- is manufactured according to CC (Coating Care) and GMP (Good Manufacturing Practice).
- will enable the toy to comply with the extractability requirements of EN 71 – part 3 (Directive 88/378/EEC) and TPCH (Toxics in Packaging Clearing Houses – previously CONEG).
- can meet European requirements with regard to migration, but this is dependent on the packaging structure. Therefore, the person placing the package on the market should carry out an assessment of the final package with regard to suitability, since they have the ultimate responsibility for compliance.

Important notes!
Ultimately, the person placing the specific package on the market is responsible for ensuring compliance with migration levels. It is impossible for the ink maker to test each ink in every potential application.

For House keeping guide lines for food packaging please refer to separate Food Packing folder.

Health, Safety and handling

Flexocure ANCORA™
- optimal storage conditions is around 15-20°C (60-70°F).
- should not be exposed to direct sunlight or heat.
- should not be allowed to freeze.
- should not be mixed with any other UV, WB or conventional ink.
- waste should be sent for incineration.
- is classified as an irritant, and therefore all skin and eye contact should be avoided. Personal protective equipment including protective clothing and gloves should be used. We recommend nitrile disposable gloves, but you should check with your supplier for suitability in contact with UV materials.
- Enhanced Statement of composition (ESoC) is available on request to support with migration testing and compliance with Plastics Regulation (EU) No 10/2011, the Swiss Ordinance 817.023.21 Annex 1 or 6 or listed on the ‘Provisional List of Additives used in Plastics’ or listed as a food additive in Regulation (EC) No 1333/2008

Please refer to the MSDS for full and latest labelling information.

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Printing advice

When changing from a non low migration ink to a low migration ink system the press must be fully cleaned.

Additives

- **YAA00002 UV antifoam**
  Max 1% may help reduce foaming on the press. This should be carefully added and it is important that it is thoroughly mixed into the ink.

- **YAA00001 UV adhesion promoter**
  Max 2% addition may improve the adhesion to PP, PVC, metallised and other difficult substrates. **NOTE:** Adding high levels into the base ink can affect the Overprintability.

- **YAR00001 UV reducer**
  Max 3% addition will reduce viscosity.

- **YAS00001 UV wax additive**
  Max 3% addition may improve scratch resistance and reduce friction.

- **YAI00001 UV initiator for Food packaging**
  Max 3% may be added to increase the curing speed.

DO NOT USE OTHER ADDITIVES!

UV varnishes

The use of UV varnishes may improve the chemical and rub resistance of Flexocure ANCORA™. We only recommend UV varnishes proven to have low migration properties.

Cleaning

- As long as Flexocure ANCORA™ is not exposed to UV light, direct sunlight or excessive heat, it will not cure in the press.
  Therefore it is not necessary to wash the press immediately after printing.
- To clean rollers, plates and other equipment, our washing liquid CLU00100 should be used. CLU00100 will dissolve Flexocure ANCORA™ quickly and easily. Adding a small amount of ethanol can increase the rate of evaporation. To our knowledge, CLU00100 does not affect EPDM rollers or printing plates.

Troubleshooting

- For specific troubleshooting advice when printing with Flexocure ANCORA™ please refer to our trouble shooting guide.
- For colour matching advice please refer to our support databases. These are available from your local Flint Group Narrow Web technical representative.

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Standard Product Overview

Shade		Article number	Light fastness	Opacity	Solvent resistance	Soap resistance	Grease resistance	Alkaline resistance
Standard process	Process Yellow	YFA10080	5-6	Semi transparent	+	+	+	+
	Process Magenta	YFA30080	3-4	Transparent	+	-	+	-
	Process Cyan	YFA50080	7-8	Transparent	+	+	+	+
	Process Black	YFA80080	7-8	Opaque	+	+	+	+
Standard Pantone® shades	Transparent White	YFA00061	-	Transparent	+	+	+	+
	Yellow	YFA10031	5-6	Semi transparent	+	+	+	+
	Orange 021	YFA20033	5-6	Semi transparent	(-)	(-)	+	+
	Warm Red	YFA30001	5-6	Transparent	(-)	-	+	-
	Red 032	YFA30032	5-6	Transparent	(-)	(-)	+	+
	Rubine Red	YFA30002	3-4	Transparent	+	-	+	-
	Rhodamine Red HR	YFA30009	7-8	Transparent	+	+	+	+
	Purple HR	YFA40012	7-8	Transparent	+	+	+	+
	Violet HR	YFA40010	7-8	Transparent	+	+	+	+
	Blue 072	YFA50072	7-8	Transparent	+	+	+	+
	Reflex Blue	YFA50021	7-8	Transparent	+	+	+	+
	Process Blue	YFA50022	7-8	Transparent	+	+	+	+
	Green	YFA60051	7-8	Transparent	+	+	+	+
	Black	YFA80071	7-8	Opaque	+	+	+	+
Other Basic Shades	Opaque White	YFA90091	7-8	Opaque	+	+	+	+
HR Pantone® shades	Yellow	YFA10035	7-8	Semi transparent	+	+	+	+
	Orange 021	YFA20025	7	Semi transparent	+	+	+	+
	Warm Red	YFA30007	7-8	Semi transparent	+	+	+	+
	Red 032	YFA30014	7-8	Semi transparent	+	+	+	+
	Rubine Red	YFA30016	7-8	Semi transparent	+	+	+	+

Resistance scale
+ = very resistant
(-) = adequate resistance (3 on a 5 point scale)
- = poor resistance

Light fastness (Blue wool scale)
8 = excellent
1 = very poor

The above information is based on experience from internal standardized tests as well as supplier information and is not to be interpreted as a warranty or guarantee in any form, as conditions beyond our control can affect the quality of printing. In case of doubt, the user should always make every effort to ensure that the products used are appropriate for the purpose.

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