

## 72 SERIES

## FLXCURE

### Description

**72 SERIES** is a UV curing flexo ink series dedicated for plastic films and paper printing with high color intensity and very good press performance

- Is recommended for printing on most paper and synthetic label substrates
- Is available in 4-colour process set and Pantone® basic shades.
- Is available in two strength versions, normal shades and high resistances colours.

**72 SERIES** is developed as a general purpose UV Flexo product for self adhesive applications, including wrap around labels, tickets / tags and boards. If used for food packaging it is the responsibility of the person placing the package on the market to ensure compliance with legal requirements.

**72 SERIES** properties:

- press ready
- fast cure
- high colour density and excellent gloss
- overprintable
- without benzophenone, 4-MBP and ITX

### Technical specifications

**72 SERIES** will work on all existing narrow web flexo presses, provided they fulfil the conditions mentioned in this data sheet.

**72 SERIES** has been engineered to work in traditional open Flexo units as well as chambered doctor blade systems with high demand on rheology and foam control.

### Printing conditions:

The following parameters are recommended when printing with **72 SERIES**.

Type of ink	Anilox volumen cm <sup>3</sup> /m <sup>2</sup>
Process colours	2.5-4
Solid colours	5-10
Printing speed (*): 70-160 m/min	

(\*). Printing speed depends of number and types of lamps, type of substrates, thickness of the ink layer, etc...

This information is based on internal tests.

Many factors can affect the final printed result, so we always recommend to check the correct performance of the ink before starting commercial production runs with **72 SERIES**

## Shelf life:

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**72 SERIES** has a 12-month shelf life guarantee. This guarantee covers 12 months from the date of manufacture (the manufacture date is at the lower left hand corner of the label).

**72 SERIES** before use to ensure product homogeneity.

## Materials recommendations:

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**72 SERIES** has been designed to have enhanced adhesion properties and has proven to adhere to a wider range of synthetic materials.

**72 SERIES** is tested and found to be suitable on a wide range of self adhesive materials including:

- Cast coated papers
- Machine coated papers
- Uncoated paper
- Top Coated thermal paper
- Polyethylene (PE)
- Top Coated PE
- Polypropylene (PP)
- Top Coated PP
- BOPP

For most synthetic materials, a surface energy of 38- 42 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:

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**72 SERIES** will obtain optimal resistance properties 24 hours after printing, assuming correct cure conditions have been followed.

Where lightfast shades are required, we recommend using **72 SERIES** High Resistant shades, all resistance properties are based on the supplier information for each of the pigments used as well as experience from internal standardized tests.

It should be noted that whilst **72 SERIES**, is resistant to chemicals and solvents when printed under correct conditions, there may still be some shade bleeding depending on the pigment chosen. Non bleeding alternatives are available.

## Health, Safety and handling:

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### **72 SERIES**

- should be stored at temperatures 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 treatment.
- 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. Please refer to the MSDS for full and latest labelling information.

## Additives:

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- **80.011 UV Adhesion promoter:** a 3-5% addition will improve the adhesion to PP,PVC, metallised and other difficult substrates. If more than 5% is required, we recommend adding extra photo initiators.

**NOTE:** Adding high levels into the base ink can affect the overprintability.

- **29.300 UV Antifoam:** 0,5% can help reduce foaming on the press. This should be carefully added and it is important that it is thoroughly mixed into the ink.

- **80.010 Photoinitiator dark shades:** max. 3% may be added to increase the curing speed of dark shades. It will discolour opaque white or light shades ink.

- **80.015 Photoinitiator light shades:** max 3% can be added to increase the curing speed of opaque white and pastel shades.

- **80.003 UV Reducer:** an addition of 1% will reduce viscosity by 5-10%. If more than 5% is added, we recommend to use additional photoinitiators. Do not use varnishes as reducers, as they can slow down the curing speed. The addition of reducers can also help flow out on difficult substrates.

- **29.303 UV Silicone additive:** an addition of 1% will lower the surface tension and also improve the flow-out. This additive may be required when printing over silicone containing products.

## UV varnishes

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The use of UV varnishes may improve the chemical and rub resistance of **72 SERIES**.