

TECHNICAL DATA SHEET

Date: 31.03.2017, Version: 5

Range name :

SICURA Plast SP

Description :

SICURA Plast SP is a low odour free radical UV series especially developed to achieve a very high polyvalence use on board and outstanding adhesion properties on a wide range of synthetic materials.

Application Fields / Market :

SICURA Plast SP is suitable for every job requiring a low residual odour.

Product safety:

This series is not suitable for: Food packaging, pharma or hygiene.

In case of food packaging application, please contact our technical department

For further information, please refer to **Siegwerk's Customer Guidance: Printing Inks for Food Packaging ("Know How")** on <https://www.siegwerk.com/en/our-responsibility/product-responsibility/customer-communications/food-packaging-safety.html>

Substrates:

Coated paper and board, Metallized paper and board
Primed aluminum foil, Primed metallized polyester, Aluminium
Treated oriented polypropylene (e.g. Exxon 38LL247, Treofan GND 40...)
Polyester, Polystyrene, PVC
Tin plate prepared for metal decoration applications (White base coat or clear lacquer) please read our "warning" chapter

It is advisable to always conduct adhesion tests prior to printing. Please consult our laboratory for new substrates not included in the above list.

Features - Performances:



ON THE PRESS SIDE

- Very stable ink/water balance even during long runs
- Compatible with all types of dampening systems with or without alcohol
- High speed runnability > 10000 f/h and > 250 m/mn



ON THE PRINTING SIZE

- Low residual odour
- High colour strength
- Minimum dot gain
- Outstanding adhesion
- Very good film flexibility for post-processing

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The inks mentioned below, have fulfilled the requirements for granting the test certificate FOGRA for UV operations :

Process yellow	70-380180-3
Process magenta	70-800731-5
Process cyan	70-113287-0
Process black	70-980214-4





Warning :

- These UV inks are guaranteed for a period of 18 months after manufacture. Please check use by date indicated on the cans.
- UV inks must be stored in a cool place
- Open containers must be kept away from light sources and be closed after usage.
- Please consult material safety data sheets (MSDS) for more information.
- For toy applications, please contact our technical department.
- For metaldec applications, because the heat resistance of some pigments is not high enough, please refer to our technical data sheet related to the series Sicura Litho Metaldec and/or contact our technical department.

UV BLACKS :

In case where a UV varnish or lamination is applied on a blend made of a Black, we recommend to use a specific UV black and not a process black :

3 blacks are available as they suit different purposes :

- Neutral black : 71-980246-4 is designed for blending and for applications requiring UV coating or lamination.
- Process black : 70-980214-4 is designed for process works.
- Deep black : 71-980253-0, 71-980234-0 are designed for heavy solids only, to be checked in case of lamination.

Auxiliary printing additives :

When certain substrates or machine conditions imply adjustments of the ink properties, the additives should be chosen in function of this substrate and of the further processing of the printed matter.

Role	Designation	Reference numbers	Proportions
Reducer	Reactive reducer	71-470089-5	1 à 5 %
Tack reducer	Anti-tack paste	81-470071-2	1 à 3 %
Cure booster	Photoinitiator	71-470108-3	2 à 5 %

For Fountain additives and Cleaning products please contact our technical department.

Packing size:

✓	Vacuum Metallic Tins	2.5 kg	Packaging code	1200
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The range :
• PROCESS INKS

Colours	Reference numbers	IWS (1)	Alcohol	Solvent	Alkali	UV Varnishing
Process Yellow *	70-380180-3	5	5	5	5	Yes
Process magenta	70-880134-5	5	5	5	3	Yes
Process magenta *	70-800731-5	5	5	4	3	Yes
Process cyan *	70-113287-0	8	5	5	5	Yes
Process black *	70-980214-4	8	5	5	5	Yes
Deep black	71-980253-0	7	1	1	1	Yes *
Intense black	71-980234-0	8	5	5	5	Yes*

Process Yellow, Process magenta and Process Cyan can be used for mixing system, whereas using of Process, Deep and Intense blacks are not recommended.

*** For heavy solid only**

Standard process colours * of the SICURA Plast SP series are meeting the specifications of the ISO 2846-1:2006(E); « Graphic technology – colour and transparency of inks sets for four-colour printing ».

• MIXING SYSTEM

Colours	Reference numbers	IWS (1)	Alcohol	Solvent	Alkali	UV Varnishing
Lemon yellow	71-380243-7	7	5	3	5	Yes
Fast yellow	71-380230-4	7	3	2	3	Yes
Warm yellow	71-380246-0	6	5	5	5	Yes
Orange 021	71-710206-5	5	5	5	5	Yes
Fast orange	71-710205-7	6	5	5	5	Yes
Warm red	71-880234-1	5	4	3	5	Yes
Fast warm red	71-880232-5	7	5	5	5	Yes
Red 032	71-880230-9	6	5	4	5	Yes
Fast rubine	71-880248-1	7	5	5	5	Yes
Fast rhodamine	71-880270-5	7	5	5	5	Yes
Purple	71-100813-6	7	5	5	5	Yes
Violet	71-100814-4	7	5	5	5	Yes
Blue 072	71-113399-1	7	5	5	5	Yes
Fast reflex blue	71-113401-5	7	5	5	5	Yes
Green	71-510507-8	8	5	5	5	Yes
Neutral black	71-980246-4	7	5	5	5	Yes
Opaque white	71-013993-2	7	5	5	5	Yes
Transp. White.	71-000291-6	/	5	5	5	Yes

(1) These light fastness values refer to a solid tone printing. Light fastness decreases when colour strength is reduced or if colours are intermixed.

This information is based on our experience and on results obtained in the laboratory, using specific processes and types of application. In view of the diversity of substrates and printing conditions, this data is communicated for information purposes only and is provided without any warranty on our part and must be authenticated by industrial tests before the products are used. Improvements are being made to our products on an ongoing basis and we therefore reserve the right to modify their composition as well as the contents of our technical data sheets. We disclaim any liability for applications for which this ink series is not foreseen.