

Technical Datasheet

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Product Name:

SICURA Card 110N WA

1. Description / Application:

SICURA CARD 110N WA is suitable for printing with waterless Toray plates.
SICURA CARD 110N WA is a universal waterless series, dedicated to a wide range of machines and substrates. The inks of this series give good lamination properties for credit cards and phone cards.

2. Product Safety:

Intended Use
Food Packaging: NO

Compliance Management

Only intended for food packaging if the processing conditions rule out the possibility of set-off in the reel or stack and the design of the final printed article ensures reliable functional barrier properties to migration. The "Customer Guidance: Printing Inks for Food Packaging" has to be observed. Please refer to this document which can be easily downloaded from our web site <http://www.siegwerk.com/en/customer-segments/customer-service/food-packaging-safety.html>

3. Properties / Substrates

Suitable for following Substrates:

- High gloss cardboard and paper
- Hard and soft vinyl
- Coated metallic substrates
- Pre-treated plastic films

- This series is not recommended for hot stamping application and is not suitable for thermal transfer

To observe:

- *Before the print job is started, **new materials**, in particular new substrates, must be checked for compatibility with the inks of this series or with the planned ink/overprint varnish combination, even if their suitability on a comparable type of substrate is proved.*
- *Preliminary adhesion tests are necessary. Due to the after-curing process, technical properties may change during the first 24 hours after printing. Please do therefore an after-check.*

In case of doubt, please contact in time our technical department.

4. Printing and processing instructions:

Lamination:

UV-SICURA Card 110N WA is suitable for lamination. However, the lamination process depends on the conditions of curing, the quality of overlay and the composition of the ink. Therefore we recommend a test before each new job or application.

Siegwerk disclaim any responsibility for problems of delamination occurred without prior testing.

- To obtain a good bond strength between the different layers:
 - Good UV curing conditions are necessary
 - Good adhesion of the printed inks on the substrate is required before lamination. The primer **85-601806-4.1180** (12R1806885) can solve adhesion problems and consequently reinforce delaminating resistance
 - Overlays coated with an adhesive are strongly recommended
- Excessive addition of anti-toning additive **71-470064-8.1020** (411-53) will decrease delaminating resistance
- High deposit or multi-superposition are critical for delaminating resistances.
- Full solid printing of metallic inks is also not recommended

In case of doubt, please contact in time our technical department.

Curing speed

Series 110N WA products achieve good curing in web printing or sheet-fed under normal drying conditions.

However, reactivity depends also on the substrate, the condition of the lamps, the conditions and adjustments of the reflectors, the thickness of the ink layer, type of colours, etc.

General information

Stir up well each ink or varnish before use. The products of this series contain additives which can part from the rest of the ink and lead to inhomogeneous print quality.

Please see also the information on the material safety datasheet.
Do not expose open containers to direct sunlight or strong light sources.

Cleaning

The inks can be removed from plates and tools by Cleaner V 316 or methoxypropanol.

5. Shelf life:

The inks and varnishes of this series have under normal conditions a shelf life of **at least 12 months**. Within this period the products are usable according to the indications of this data sheet.

Normal conditions mean:

- storage in firmly closed, not yet tapped containers;
- temperatures not exceeding 20°C for weeks or 25°C for days.
- Do not expose open containers to direct sunlight or strong light sources.

6. Product list:

Product Name	Product Code	Light Resistance according to wool scale WS (ISO 12040)	solvent Resistance (ISO 2836)	Alcohol Resistance (ISO 2836)	Alkali-/ Soap Resistance (ISO 2836)
110 PROCESS YELLOW C 104	70-380181-1.1180	4-5	5	4-5	5
110 PROCESS MAGENTA C 101	70-880155-0.1180	4	4-5	2-3	2-3
110 PROCESS CYAN C 102	70-113258-1.1180	7	5	5	5
110 PROCESS BLACK C 114	70-980202-9.1180	4-5	5	5	2-3
110 PROCESS BLACK C SCRATCH RESISTANT	70-900302-4.1180	4-5	4-5	5	2-3
110 ORANGE 590	71-710215-6.1180	5-6	5	5	5
110 RED 032 C 108	71-880275-4.1180	5	4-5	5	5
110 RHODAMINE RED 110	71-880276-2.1180	3-4	2	2	4
110 PURPLE C 118	71-100832-6.1180	7	5	5	5
110 VIOLET 111	71-100833-4.1180	7	4	4	5
110 BLUE 222	71-113316-5.1180	7	5	5	5
110 GREEN 113	71-510514-4.1180	7-8	5	5	5
110 BLACK 869	70-980201-1.1180	7	4	4	5
110 INTENSIVE BLACK 300	71-980265-4.1180	7	4	4	5
110 OPAQUE WHITE	71-010159-3.1180	8	5	5	5
110 TRANSPARENT WHITE 850	71-004043-7.1180	-	5	5	5
110 TRANSPARENT WHITE 589	71-004042-9.1180	-	5	5	5
110 ORANGE 106	71-710210-7.1180	5-6	5	5	5
110 REFLEX BLUE 112	71-110572-6.1180	4	1-2	1	5
110 PURPLE 224	71-880304-2.1180	7	5	5	5
110 WARM RED 107	71-880292-9.1180	5	3-4	4-5	5
110 PROCESS YELLOW C (FAST) 979	70-380179-5.1180	5-6	4-5	5	5
110 PROCESS MAGENTA C (FAST) 980	70-880156-8.1180	6-7	5	5	5
110 WARM RED (FAST) 544	71-880281-2.1180	6-7	4-5	5	5
110 RHODAMINE RED (FAST) 211	71-880279-6.1180	7	5	5	5
110 REFLEX BLUE C (FAST) 557	71-113364-5.1180	7	5	5	5
110 PROCESS BLACK C (FAST)	70-900250-5.1180	6-7	5	5	5

Fanal-shades are available upon request. Since fanal-dyes have a high bleeding tendency, tests have to be carried out before printing.

For varnishes and additives, please see the separate Technical Datasheet

Because of the differences in materials for printing, processing conditions and test criteria this Technical Data Sheet can only be of an advisory nature. Our data reflect the latest state of our knowledge and are based on the characteristics established in the laboratory and on practical experience.

Your own tests with the original materials under the respective conditions are indispensable. We disclaim any liability for applications for which this ink series is not foreseen.