

Technical Datasheet

Issue: September 2015

Product Name

SICURA Card 37700

1. Description / Application

SICURA Card 37700 is a UV system, developed to meet the high demands of difficult plastic substrates printed in wet offset. This series is formulated to reach high delaminating values (overlay applications) and offers optimised lithographic behaviour (press stability, optimised dot gain, reduced waste).

SICURA Card 37700 is the system of choice for plastic cards and similar applications typically laminated PVC and PET cards.

2. Product Safety

Intended Use

Food packaging, pharma, or hygiene: **NO**

Only acceptable 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. 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> in particular chapter 5. "The printer's selection of ink" has to be observed.

3. Properties / Substrates

Properties

- high colour strength
- optimized curing
- compatible with most of the commercial fountain solution systems, alcohol- as well as conventionally water based (in case of doubt, please contact the producer.)

SICURA Card 37700 is designed to achieve outstanding adhesion, which makes it particularly suitable for lamination.

As colour shifts and adhesion are also influenced by the laminating substrate and adhesive, it is highly recommended to make preliminary test prints. Particularly for yellow and reddish shades.

To increase adhesion and bond strength resistance we recommend to use primer **85-601806-4** (Offset Primer varnish) applied in dry offset between 1 and 1.5 g/m².

As the primer has a residual tack after curing, it has to be used only for in-line applications.

Substrates

SICURA Card 37700 offers top performance on following substrates:

- PVC
- ABS
- Polycarbonate

Please consult our technical services for substrates that are not included in above list or in case of any other doubts.

4. Printing and processing instructions

Guidelines for use

Before the print job is started, new materials must be checked for compatibility with the inks of this series or with the planned ink-/overprinting varnish combination, even if their suitability on a comparable type of the same substrate group is proved.

The test prints, especially on self-adhesive labels, have to be examined after die-punching (in particular at the edges), for adhesion, resistance to scratching and water (resistance to wet scratching and scuffing), adhesion and scratch resistance after heat-sealing, resistance of the printed ink to the packaging contents and other application-specific requirements.

Due to the post-curing process, these properties may change during the first 24 hours after printing. Therefore please make a re-check after one day.

Consequently, for every new job in which printing is done on a known material, but with untested ink and printing combinations, the aforementioned tests have to be carried out as well.

Stir up well each ink or varnish before use. Mainly whites, colours containing white, varnishes, mat varnishes as well as gold and silver inks show sedimentation of essential components.

Do not handle products without having consulted the corresponding safety data sheets. We supply them together with the first shipment.

Cleaning

The inks can be removed from tools and screens by using methoxypropanol. Reactive UV-thinners are not suitable for cleaning.

5. Shelf life

The inks of this series have under normal conditions a shelf life of **at least 12 months**. Within this period the products are usable in conformity with 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 fastness	Alkali Resistance DIN ISO 2836	Ethanol Resistance DIN ISO 2836	Solvent Resistance DIN ISO 2836
Card 37700 Process Yellow C 700	70-380144-9	4	Yes	Yes	Yes
Card 37700 Process Magenta C 701	70-880158-4	4-5	Yes	Yes	Yes
Card 37700 Process Cyan C 702	70-113283-9	7	Yes	Yes	Yes
Card 37700 Black	70-980146-8	7	Yes	Yes	Yes
Card 37700 Greenish Yellow	71-380248-6	6	Yes	Yes	Limited
Card 37700 Fast Yellow	71-380215-5	6-7	Yes	Yes	Yes
Card 37700 Yellow 194	71-300381-2	4-5	Yes	Yes	Yes
Card 37700 Yellow 712	71-380186-8	4	Yes	Yes	Yes
Card 37700 Rubine Red 762	71-880315-8	4-5	Yes	Yes	Yes
Card 37700 Red 032 C 732	71-880322-4	4	Yes	Yes	Yes
Card 37700 Warmred 745	71-880321-6	4	Yes	Yes	Yes
Card 37700 Orange 021 C 721	71-710236-2	4	Yes	Yes	Yes
Card 37700 Rhodamine Red C 704	71-880324-0	5-6	Yes	Yes	Yes
Card 37700 Purple C 705	71-100827-6	5-6	Yes	Yes	Yes
Card 37700 Process Blue 774	70-113300-1	7	Yes	Yes	Yes
Card 37700 Reflex Blue 706	71-113340-5	6-7	Yes	Yes	Yes
Card 37700 Blue 072 C 772	71-113349-6	6-7	Yes	Yes	Yes
Card 37700 Green C 708	71-510502-9	7-8	Yes	Yes	Yes
Card 37700 Violet C 709	71-100826-8	6-7	Yes	Yes	Yes
Card 37700 Black NEUTRAL 711	70-980200-3	7	Yes	Yes	Yes
Card 37700 Black 382	70-980197-1	7	Yes	Yes	Yes
Card 37700 Black 715	70-980199-7	7	Yes	Yes	Yes
Card 37700 Transparent White 710	71-004044-5	-	Yes	Yes	Yes
Card 37770 Opaque White	71-013995-7	8	Yes	Yes	Yes
Card 37700 Rubine Red light resist.	71-801216-4	6	Yes	Yes	Yes
Card 37700 Blue 286	71-113366-0	6-7	Yes	Yes	Yes
Card 37700 Gold VISA 1235	71-400093-2	4	Yes	Yes	Yes
Card 37700 Blue CIRRUS BL. 299	71-113347-0	6-7	Yes	Yes	Yes

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.

Siegwerk Switzerland AG, Neuenburgstrasse 48, 3282 Bargaen, www.siegwerk.com