

Technical Datasheet

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Product Name

SICURA Typo 41-2

1. Description / Application

High performance and high colour strength printing inks, curing by radical mechanism with UV-light, **for rotary letterpress label-printing machines**. Suitable for a wide range of synthetic substrates (in-line Corona treated polypropylene included) and for paper.

On the basis of its proven UV-letterpress technology, Siegwirk offers with the series SICURA Typo 41-2 a modern ink system, which allows to run up to 50 % higher production speed on the existing machine equipment, due to the increased reactivity, and without loss in technical quality.

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

- excellent flow properties
- very good fastness properties
- designed mainly for over varnished or laminated jobs
- with additive **71-470086-1** (Nutri-ADD Scratch paste E15): scratch and rub resistant even without varnishing or laminating

Substrates

Adhesion, resistance to scratching and scuffing, water resistance (wet scratch and wet scuff resistance) and very good resistances to cosmetics, lotions, shampoos, alcohol, cleaning agents and solvents are obtained on standard label materials. However, individual tests under original conditions have to be carried-out before printing.

Filling goods resistance

It is always recommended to approve the resistance against filling goods.

Special applications

Except for special new paper qualities, the inks of this series are **not suitable for economic thermal papers** due to the darkening of the thermo-sensitive layer.

The inks of this series are principally **suitable for thermal transfer and hot foil stamping**. However, tests with original material under industrial conditions have to be done, since the result depends largely on the quality of the used substrate.

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



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.

() Some of the inks contain Fanal dyes which have a **high bleeding tendency**. Suitability of the inks for bleeding sensitive applications have to be tested in advance.*

Unprimed polyethylene and PVC substrates sometimes contain lubricants, which migrate to the surface e.g. during storage. Such substances can negatively influence the adhesion, the scratch and water resistance of the printed inks. These undesired effects can also appear when the intensity of the in-line Corona treatment is excessive.

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 by using methoxypropanol.
Reactive UV-tinners 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.

Exceptions:

71-980179-9, 41-2 Black C 9990 = **only 9 months!!**
71-980264-7, 41-2 Intensive Black 9992 = **only 9 months!!**

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 on wool scale DIN ISO 12040	Alkali Resistance DIN ISO 2836	Ethanol Resistance DIN ISO 2836	Solvent Resistance DIN ISO 2836
41-2 White 1020	71-014003-9	8	Yes	Yes	Yes
41-2 Greenish Yellow 0300	71-380234-6	6-7	Yes	Yes	Limited
41-2 Yellow C 1200	71-380233-8	4	Limited	Yes	Yes
41-2 Yellow light resist. 1205	71-380232-0	6	Limited	Yes	Yes
41-2 Orange 1608	71-710217-2	4	Yes	Yes	Yes
41-2 Orange 1605	71-710218-0	6-7	No	Yes	Yes
41-2 Warmred C 2050	71-880329-9	5-6	Yes	Yes	Yes
41-2 Red PMS 032 C 2048	71-880328-1	6-7	Yes	Yes	Yes
41-2 Red 032 C light resist. 2055	71-880274-7	6	Yes	Yes	Yes
41-2 Rubine Red C 3000	71-880207-7	4-5	Limited	Yes	Yes
41-2 Rubine Red light resist. 3005	71-880206-9	6 - 7	Yes	Yes	Yes
41-2 Rhodamine Red fanal 4500 *	71-880203-6	3-4	Yes	Limited	Limited
41-2 Rhodamine Red lightfast 4505	71-880202-8	6 - 7	Yes	Yes	Yes
41-2 Purple fanal 5400 *	71-100844-1	4-5	Yes	No	No
41-2 Purple lightfast 5405	71-100843-3	6 - 7	Yes	Yes	Yes
41-2 Violet lightfast 5505	71-100842-5	6 - 7	Yes	Yes	Yes
41-2 Violet fanal 5513 *	71-100841-7	3 - 4	Yes	No	No
41-2 Blue PMS 072 C 6413 *	71-113327-2	6 - 7	Yes	Yes	Yes
41-2 Reflex Blue C 6400 *	71-113325-6	6 - 7	Yes	No	Yes
41-2 Reflex Blue 6418	71-113336-3	3	No	No	No
41-2 Process Blue C 5650	70-113252-4	7	Yes	Yes	Yes
41-2 Green C 7900	71-510533-4	8	Yes	Yes	Yes
41-2 Black C 9990	70-980179-9	7-8	Yes	Yes	Yes
41-2 Intensive Black 9992	71-980264-7	7	Yes	No	Yes
41-2 Transparent White 1000	71-004050-2		Yes	Yes	Yes

Light Resistance

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

This applies also to other resistances mentioned in the product list.

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.