

Technical Datasheet

Issue: October 2016

Product Name

SICURA Flex Metal

1. Description / Application

High-quality, brilliant UV- curing metallic inks suitable for label applications in flexo printing.

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 opacity

Substrates

Adhesion, scratch and scuff resistance, water resistance (wet scratch and wet scuff resistance) as well as resistance to cosmetics, shampoos alcohol and cleaning agents are (measured on standard requirements) obtained on following substrates:

- In-line Corona-treated polyethylene, with a surface tension of at least 40 - 45 mN/m.
- In-line Corona-treated polypropylene, with a surface tension of at least 42 - 45 mN/m.
- Varnished / primered polyethylene and polypropylene.
- Coated and uncoated papers and boards.

Other substrates after proper technical evaluation.

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

4. Printing and processing instructions

Anilox rollers

10 - 12 cm³/m² with 120 - 160 l/cm

This information is only a recommendation. In order to achieve an optimal result, please carry out some tests.

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 before use. Gold and silver inks show sedimentation of essential components during storage. Please stir up the inks carefully, since strong shear forces can damage the metallic pigments and thus worsen the metallic effect.

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

Cleaning

The inks can be removed from tools 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 4 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 number	Lightfastness Woolscale (DIN 16525)	Alkali-/soap resistance (DIN 16524)	Alcohol resistance DIN 16524)	Solvent resistance
Flexo Gold 871C E01	81-408623-7	7	2	5	4
Flexo Gold 872C E01	81-408628-6	7	2	5	4
Flexo Gold 873C E01	81-408622-9	7	2	5	4
Flexo Gold 874C E01	81-400217-6	7	2	5	4
Flexo Gold 876C E01	81-408656-7	7	2	5	4
Flexo Silver E01	81-408662-5	7	2	5	4
Flexo Silver E90	81-408657-5	7	2	5	4
Flexo Highgloss Silver E01	81-400301-8	7	2	5	4
Flexo Sleeve Silver E01	81-400193-9	7	2	5	4
Flexo Sleeve Rich Gold E01	81-400330-7	7	2	5	4
Flexo Sleeve Pale Gold E01	81-400331-5	7	2	5	4

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.