

# Technical Datasheet

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## Product Name

SICURA Flex Varnishes and Primers

## 1. Description / Application

UV-Flexo varnishes and primers curing by radical mechanism using UV-light. The recommended application is by flexo unit.

UV Primers provide adhesion of UV inks on a wide variety of substrates. They present good adhesion, good flexibility and good overprintability.

## 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 of varnishes

- high reactivity
- very fast curing
- uniform wetting on printing inks
- good adhesion
- good abrasion resistance
- good chemical resistance

### Substrates

Prints with good adhesion, good resistances to cosmetics, lotions, shampoos, alcohol, cleaning agents and solvents are normally obtained with standard label substrates - proper application conditions and a correct selection of the individual pre-printed inks preconditioned.

Preliminary adhesion tests are recommended.

In case of doubt, please contact our technical department.

#### 4. Printing and processing instructions

- For printing on inks containing high amounts of waxes, a preliminary test is recommended.
- The possible penetration of the varnish into porous substrates may affect the final properties.

##### Guidelines for use

*Before the print job is started, new materials must be checked for compatibility with the planned substrate/ink /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), resistance to the packaging contents and other job-specific requirements.*

*Due to possible different material shrinkage and other alterations, these examinations must be repeated after one day.*

*Levelling/printability, mechanical resistances (e.g. adhesion, folding resistance, punching resistance), resistance to water and the weather, and in particular the resistances to the packaged products, depend largely on the properties of the pre-printed inks. The latter is particularly applicable if the ink film on the punching edge is exposed, and hence subject to lateral attack.*

*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.*

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

##### Cleaning

The products can be removed from tools by using methoxypropanol.

#### 5. Shelf life

The products have under normal conditions a shelf life of **at least 12 months**. Within this period the product is usable in conformity with the indications of this data sheet.

##### Exceptions

Items marked with \* in the product list have a shelf life of **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       | Silicon cont. | Comments   |
|--------------------------------|--------------------|---------------|--|
| <b>Gloss varnishes</b>         |                    |               |  |
| 39-8 varnish 1004 TT E01       | <b>85-600297-7</b> | No            | Particularly suitable for thermo transfer printing as well as for hot foil stamping. With corona pre-treatment also usable as OPV for HP Indigo. |
| Flex Overprintvarnish E51      | <b>85-600533-5</b> | Yes           | Resistant against chemicals.   |
| Flex Overprinting varnish E89  | <b>85-601805-6</b> | Yes           | High gloss OPV.  |
| Flex Overprinting Varnish      | <b>85-600384-3</b> | Yes           | Resistant against chemicals. With corona pre-treatment also usable as OPV for HP Indigo. Benzophenone free.                                      |
| Flex Varnish thermal paper E99 | <b>85-600441-1</b> | Yes           | Especially for selected ECO-, semi- and Topcoat-Thermal papers.  |
| <b>Release varnishes</b>       |                    |               |  |
| Flex Release varnish E42       | <b>85-601815-5</b> | Yes           | Release varnish for multilayer-labels.   |
| 39-8 Release varnish           | <b>85-600335-3</b> | Yes           | For multilayer-labels. Suitable for long-term storage.   |
| Flex Release varnish           | <b>85-601739-7</b> | Yes           | Release-varnish for scratch-off applications.  |
| <b>Matt varnishes</b>          |                    |               |  |
| Flex Matt varnish E01          | <b>85-600347-0</b> | No            | Standard matt varnish. With corona pre-treatment also usable as OPV for HP Indigo.   |
| 39-3 Matt varnish 0002 *       | <b>85-600668-9</b> | No            | Formulated for outside print on Shrink Sleeves.  |
| <b>Primers</b>                 |                    |               |  |
| Flex Primer varnish E33        | <b>85-601796-7</b> | No            | Hybrid-Primer with cat. components. Optimized adhesion.  |
| Flex Primer varnish            | <b>85-601778-5</b> | No            | Primer for standard plastic substrates.  |

Because of the differences in materials for printing, processing conditions and test criteria this Technical Information 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 product is not foreseen.