



Technical Information

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Product Name

85-600595-4 Nutriflex Laminating adhesive E01

1. Description / Application

Chlorine-free UV curing laminating adhesive for in-line laminating of printed polyethylene and polypropylene self-adhesive label materials with polypropylene laminated films in particular. Especially suitable to laminate inks of the UV SICURA LM series in the UV-Offset and UV SICURA FLEX series 39-10 LM.

The adhesive is formulated for migration-sensitive label applications (e.g., food labels).

A flexo varnishing unit, equipped with a laminating station and following UV-radiator unit can apply the adhesive. To get a better runability, the adhesive can be warmed-up to 50°C max.

2. Product Safety

Intended Use

Food packaging, pharma, or hygiene: **YES**

Only for food packaging inks

These inks are only suitable for use on the non-food-contact side of food packaging, provided that they are applied using the relevant Good Manufacturing Practices (a system for ensuring that products are consistently produced and controlled according to quality standards) and according to the guidelines in this Technical Data Sheet.

The printer, converter and the packer/filler each have a responsibility to ensure that the finished - printed - article is fit for the intended purpose(s) and that the ink and coating components do not migrate into the food at levels that exceed legal, regulatory and industry defined requirements.

Please refer to Siegwirk's "Statement of Composition" for further regulatory information.

In case of specific applications, please contact your technical application service.

For further information, please refer to Siegwirk'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

- Low viscosity and printable like a UV-Flexo varnish.
- Low odour, compared to usual laminating adhesives.
- This adhesive was not developed for the use of Bluelight Excimer radiators (308 nm).

Substrates

Good compounds, resistant also against water, cosmetics, creams, shampoos, alcohol, cleaning agents and solvents, which show good compound values are normally reached with the following combinations at appropriate process conditions:

- In-line on min. 42 – 45 mN/m Corona pre-treated and with inks of series SICURA LM (all) or 39-10 LM solid or partially printed polyethylene or polypropylene, against orientated polypropylene with 42 to 44mN/m, Corona pre-treated by the manufacturer or in-line.
- Varnished/primered polyethylene or polypropylene, solid or partially printed with inks of series SICURA LM (all) or 39-10 LM, against orientated polypropylene with min. 42 to max. 44 mN/m, corona pre-treated (by the manufacturer or in-line).

Suitability of each substrate has to be tested under original conditions before print run.

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

4. Printing and processing instructions

The application weight of this laminating adhesive has to be at least 4 g/m².

Lower coat weights lead to worse compound values. These laminating adhesives **must not be thinned**, as otherwise, the application weight and consequently the compound values fall drastically.

Varnishing reservoir- and unit, pumps and hoses **have to be absolutely clean** before filling and have to be kept clean.

Slightest contact with other adhesives or varnishes can influence the hardening of this laminating adhesive and decrease the bond strength.

Unlike other products, the prints do not run through an extreme post-curing phase following the passage through the UV-radiator.

We expressly point out to the fact that we can give no guarantee that all the SML will be met in the final use. We recommend securing the whole system by a migration analysis.

In case of doubt, consult our technical service.

Guidelines for use

Before the print job is started, new materials must be checked for compatibility with the planned laminating adhesive/inks combination, even if their suitability on a comparable type of the same substrate group is proved.

The test laminates have to be examined after die-punching (in particular at the edges) for bond strength, and, if necessary, for resistance to water, the packaging contents and other job-specific requirements.

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.

Please see also the information on the material safety datasheet.

Cleaning

The adhesive can be removed from tools by using methoxypropanol.

5. Shelf life

This product has 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.

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.

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.