



Technical Information

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Product Name

85-600570-7 Nutriflex Gloss varnish E04

1. Description / Application

UV Flexo gloss varnish, radical hardening, **suitable for a wide range of plastic materials and other printing carriers**, for all in-line types of UV-Flexo printing machines.

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 odour, off-flavour and small migration risk
- excellent water and product stabilities
- low shrinking
- with suitable substrate and cross-linking agent pasteurization- and sterilization-resistant

Substrates

Adhesion, resistance to scratching and scuffing, water resistance (wet scratch and wet scuff resistance), heat-sealing resistance and resistances to fats, acid or alkaline products, cosmetics, lotions, shampoos, alcohol, cleaning agents and solvents are normally obtained on following label substrates:

- Varnished/primered polyethylene (material for self-adhesive labels).
- PVC-varnished polypropylenes (material for self-adhesive labels).
- Selected treated/primered polyesters.
- Selected varnished/primered aluminum-metallized foils and cover foils.
(e.g. with selected polyester, nitro or PVC-primer)
- Uncoated papers and cardboards with low porosity.

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

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



Special applications

This varnish is **not suitable for economic thermal papers** due to the darkening of the thermo-sensitive layer.

Due to its good heat-smear resistance and smooth surface, this product is normally **suitable for top-coat thermal papers**.

As for all UV-flexo varnishes, the thermal answer can be affected if the ink layer is too thick.

This varnish is normally **not hot stampable and not overprintable** with the thermal-transfer method.

4. Printing and processing instructions

Guidelines for use

Before the print job is started, new materials must be checked for compatibility with the planned varnish/inks 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 weather resistance, 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.

Optimum performance is achieved by using the following criteria in the selection of the printing inks:

- Preferably radical UV-Letterpress, UV-Offset, UV-Screen printing or UV-Flexo inks.
- Best possible adhesion and resistance to water on the substrate to be printed.
- Best possible resistance of the printing ink series used to the packaged product.
- Exclusion of specific shades which contain pigments with poor fastness to the specified packaging content e.g. poor light and weather fastness.

Please see also the information on the material safety datasheet.

Cleaning

The varnish can be removed from tools by using methoxypropanol.

5. Shelf life

This varnish 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.