## Technical Information

### Issue: September 2015

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<td>85-601621-7 Flex Matt varnish E79</td>
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### 1. Description / Application

Flexo matt overprinting varnish curing with UV-light by radical mechanism for in-line varnishing, particularly for polyethylene Corona pre-treated and primered plastic adhesive label materials.

### 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")](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

Suitable for achieving silky matt to matt surfaces – depending on application quantity.

#### 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 standard label substrates.

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

#### Special applications

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

Because of its limited thermal printer hotsmear resistance and poor slip properties it is usually **not suitable for Top-Coat thermal papers**.

This varnish is normally **not suitable for thermal transfer and hot foil stamping**.

In case of doubt, consult our technical service.
4. Printing and processing instructions

Make sure that the mattness of this varnish is adequate to be overprinted with needle printers or the like.

**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 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.*

**Optimum performance is achieved by using the following criteria in the selection of the printing inks:**
- Preferably cationic UV-Flexo inks.
- UV inks with or without few surface additives (stampable series).
- 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.

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