

TECHNISCHE INFORMATION
INFORMATION TECHNIQUE

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Product name: **SICURA FLEX UV Laminating Adhesive 85-601592-0.** (39-0-0167)

Product description: Chlorine-free UV-radiation 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 TYPO series 41-2 and UV SICURA FLEX series 39-6.

Printing process: Flexo lacquering unit, which is equipped with a laminating station and following UV-radiator unit.

Printing substrate/
laminating films: Good compounds, resistant also against water, cosmetics, creams, shampoos, alcohol, cleaning agents and solvents, which show good compound values (min. 2 N/cm) are normally reached with the following combinations at appropriate process conditions:

- in-line on min. 42 – 45 mN/m **corona pretreated** and with inks of series 41-2 or 39-6 full surface or partially printed **polyethylenes** or **polypropylenes**, **against orientated polypropylenes** with min. 42 till max. 44 mN/m, **corona pretreated** on behalf of the manufacturer or in-line.
- **lacquered/primered polyethylenes or polypropylenes**, full surface or partially printed with inks of series 41-2 or 39-6, against **orientated polypropylenes** with min. 42 till max. 44 mN/m, **corona pretreated** on behalf of the manufacturer or in-line.

To observe:

- *Before the print job is started, **new materials** must be checked for compatibility **with the laminating adhesive/ink combination**, even if their suitability on a comparable type of the same substrate group is proved.*
- *The **test prints** - are to be examined, **after die-cutting** (in particular at the edges), for compound adhesion, resistance to water and to the packaging contents, as well as other application-specific requirements. Due to possible different material shrinkage and other alterations, **these examinations must be repeated after not earlier than one day.***
- *Therefore, before starting a new print job on a known material, but with **novel ink and layout combinations**, the above-mentioned examinations must be done as well.*

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

Properties:

- low viscosity (η : 1'000 mPas \pm 200 mPas) and printable similar to a UV-flexo varnish.
- compared with usual laminating adhesives low odour.
- This adhesive has not been developed for the use of Bluelight Excimer radiators (308 nm).

Remarks:

- This laminating adhesive **must not be thinned**, as otherwise the application weight and consequently the compound values fall drastically.
- Lacquer basin, lacquering unit, pumps and hoses **absolutely have to be cleaned** before the filling and have to be kept clean. The slightest contact with other adhesives or lacquers can influence the hardening of this laminating adhesive under loss of the compound adhesion.
- The application weight of this laminating adhesive has to be at least 6 g/m². Lower layers lead to worse compound values.
- Unlike other products the printings **do not** run through an extreme after curing phase following the passage through the UV-radiator.

Shelf life:

Inks and varnishes of this series have under normal conditions a shelf life of **at least 9 month**. 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.

The shelf life can be extended by cool storage below 15°C.

HSE

Product Safety

Intended Use

Food Packaging: no

Compliance Management

Only intended 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.

The "Customer Guidance: Printing Inks for Food Packaging", in Appendix 2 "the Selection of the Ink Product" <http://www.siegwerk.com/en/customer-segments/sheetfed-uv/service.html> has to be observed.

Because of the differences in materials for printing, processing conditions and test criteria this Technical Information can only be of advisory character.

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.