TUBILUX TD 90 NF

Characterization	Special adhesive for transfer printing with metallised PES films
Chemical Structure	Polymer preparation
Supplied Form	White, shiny, highly viscous paste
Ionic Character	Anionic
pH Value	8.1 - 9.5
Stabilities	The product is highly sensitive to frost. Temperatures around the freezing point cause irreversible changes.
Storage	In a cool and dry place in closed original containers, but not below + 5 °C. We recommend not to exceed a storage time of 6 months. Stir the product thoroughly before use. Opened containers must be closed again tightly.

The above given values are product describing data. Please consult the 'delivery specification' for binding product specifications. Further data about product properties, toxicological, ecological data as well as data relevant to safety can be found in the safety data sheet.

Properties

TUBILUX TD 90 NF was especially developed for transfer printing with metallised PES films.

TUBILUX TD 90 NF is a film adhesive free from PVC and formaldehyde which produces very soft, shiny film prints.

The fastness level that can be achieved depends on the following parameters:

- type and quality of fabric (elastic, stiff, water-repellent, hydrophilic, finished, harsh, soft)
- printing method / application amount
- transfer parameters for ironing press / transfer calender
- film quality (hard or soft release, thick or thin embossing layer)

Application Procedure

Textile Substrates

In normal textile printing the film printing process can be applied to nearly all kinds of textiles, particularly flat woven fabrics which are sufficiently heat-resistant.

Preparation of Printing Paste

TUBILUX TD 90 NF is a special one-component adhesive paste, suitable for rotary, flat screen and screen printing.

The print paste viscosity has to be adjusted to the type of application equipment. In case of thickening, this can be easily done by adding a synthetic thickener. The viscosity can be decreased by simply adding water (10 % at the most) or better by a careful drop by drop addition of a diammonium phosphate solution (1 : 2).

Printing Process

Independent of the printing system employed (rotary, flat screen or hand printing) an even surface print on the fabric is necessary to guarantee a sufficient adhesive contact to the film. We recommend to use screens which are not finer than 60 mesh.

TUBILUX TD 90 NF can be easily removed from screens and doctor systems with cold water. It should be avoided that left-over adhesive dries in on the screens.

Drying

The drying conditions must be adjusted in a way that the applied adhesive forms a film which is stable to mechanical strain. A premature curing of the thermal adhesive caused by too high drying temperatures (above 150 °C) or too long drying times at temperatures between 110 - 150 °C must be avoided. Experience has shown that drying temperatures ranging from 100 - 120 °C are optimal.

Transfer Process

The transfer of the film is effected either continuously by means of transfer calenders or discontinuously with ironing presses. The printed side of the fabric has to be joined to the matt side of the film.

Transfer press:	160 - 190 °C, 30 - 60 seconds contact time 150 - 500 p/cm^2 pressure
Transfer calender:	160 - 190 °C, 30 - 60 seconds contact time A constant pressure of the revolving felt cloth must be ensured. Usually, a medium to high tension of the felt cloth is applied.

Releasing the Shiny Printed Areas and Removing the Carrier Film from the Textile Substrate

After being completely cooled down, the carrier film is removed from the fabric releasing the coloured lacquer layer on the printed areas.

The usual embossing films of several manufacturers can be used as films. Their suitability must be checked before use.

We reserve the right to modify the product and technical leaflet.

Our department for applied technique is always at your service for further information and advice.

Our technical advice and recommendations given verbally, in writing or by trials are believed to be correct. They are neither binding with regard to possible rights of third parties nor do they exempt you from your task of examining the suitability of our products for the intended use. We cannot accept any responsibility for application and processing methods which are beyond our control.

Edition: April, 2024

CHT Germany GmbH, P.O. Box 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany
Telephone: 07071/154-0, Fax: 07071/154-290, Email: info@cht.com, Homepage: www.cht.com
CHT TURKEY KİMYA SAN. VE TİC.A.Ş., Akçaburgaz Mah. 3118. Sok. No:2 Esenyurt/İstanbul, Tel: +90 212 886 79 13, Fax:+90 212 886 93 47,
Email: info.turkey@cht.com