
TUBIGUM® DK 15

Characterization	Permanent adhesive for printing textiles and textile cuttings
Chemical Structure	Dispersion of an acrylic acid ester copolymer, APEO-free
Supplied Form	White, medium viscosity paste
Ionic Character	Anionic
pH Value of a 10 % Solution	3.3 – 6.3
Solubility	TUBIGUM® DK 15 is miscible with water at any ratio.
Stabilities	TUBIGUM® DK 15 can be diluted with water and removed from the printing blanket by a water/alcohol/surfactant blend. TUBIGUM DK 15 cannot be dissolved in organic solvents or white spirit.
Storage	<p>If stored properly in a cool place between + 5 °C and + 25 °C in closed original containers, the product will hold for at least six months. Protect from frost and excessive heat. Opened containers must be closed again tightly.</p> <p>TUBIGUM® DK 15 is highly sensitive to frost. After the impact of temperatures around the freezing point irreversible changes will occur.</p>

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

After evaporation of the water TUBIGUM® DK 15 is available as a transparent, flexible film with high sticking properties even in coldness, from which soilings such as printing paste residues, etc. can be easily removed with water. The films have a very good stability to all chemicals, auxiliaries and dyestuffs used in printing pastes. Printing pastes containing white spirit may affect the film adhesion for a short time, but after cleaning with water the adhesion will recover completely.

TUBIGUM® DK 15 can be applied without spray mist and unpleasant odour and is therefore much more advantageous than spray adhesives containing solvents.

Another special feature of TUBIGUM® DK 15 is that the product does not cause any inconvenience by odour or any health hazards on application and subsequent evaporation.

® = registered trade mark

Application Procedure

Adhesive Application

TUBIGUM® DK 15 is applied purely or if need be diluted with water at a ratio of 2 : 1 to 1 : 1. The product is applied onto the thoroughly pre-cleaned blanket by repeated coating with intermediate stoppage to let the water evaporate by means of the usual application units or screens. However, TUBIGUM® DK 15 needs a slightly longer evaporation time than permanent adhesives based on solvents.

As printing blanket adhesive TUBIGUM® DK 15 is usually applied on circular printing machines or sample printing machines but not on rotary printing machines. Due to its low adhesive power TUBIGUM® DK 15 is only used as coating agent on a rotary printing screen which is then used as lint screen.

After final evaporation which is effected best over night, the TUBIGUM® DK 15 film is transparent, flexible and has a distinctly high adhesion. Before the applied adhesive film of TUBIGUM® DK 15 is not absolutely clear, no fabric should be placed on it, as there would be the risk that the adhesion of the film to the fabric is stronger than to the blanket and therefore it would remain on the fabric when taking it out of the printing machine.

For light-weight fabric qualities the applied adhesive layer should not be too high to prevent the fabric from sinking into the adhesive when being pressed, which deteriorates the printing process and leads to an insufficient penetration.

Printing Machines

TUBIGUM® DK 15 can be used on all hand printing tables or circular printing machines.

Textile Substrates

TUBIGUM® DK 15 can be successfully applied as adhesive on most textile qualities by placing the fabric on the blanket and pressing it down with a roller or manually. Films made of hard and soft PVC, polyester as well as electrically pretreated polyethylene or polypropylene have also an excellent adhesion. Strongly raised or fluffy fabric qualities quickly decrease the adhesive power through their detached textile fibres and are therefore less suited.

Further Recommendations for Use

After the adhesive has been applied, the fabric can be easily removed from the blanket without tearing out parts of the adhesive. Therefore, the fabric needs not to be washed and the afterwashing processes which are applied depending on the printing method in use are not affected either.

Any adhering printing paste remainders can be easily removed with the usual units for cleaning the blanket.

It is known from experience that with permanent use the adhesion of the film is reduced by lint from the textile. This lint can normally be washed off from the adhesive film with water. When the film is fully dry, the original adhesion is regained.

If the adhesion decreases after a while it is possible to postpone the renewal of the entire adhesive layer by applying a further thin layer on the existing one. This can be repeated once or twice. Then, the adhesive film must be removed from the printing blanket.

TUBIGUM® DK 15 cannot be removed with the usual solvents. We recommend a combination of

49 % water
49 % alcohol (methyl alcohol, ethyl alcohol or ISO-propyl alcohol)
and 2 % wetting agent

The existing adhesive film is wetted with this solution and removed mechanically from the printing blanket with the squeegee after a sufficient dwelling time. Then the new adhesive film is applied as described before.

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: January 2016

CHT Germany GmbH

Postfach 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