

1. Primary Note

POLI-TAPE offers a wide range of self-adhesive digital printing media for many different applications. POLI-TAPE can only ensure that the films conform as specified if the following application and processing instructions are adhered to.

POLI-TAPE recommends to use rolls from the same batch number for graphical applications to guarantee that there is no splice in the rolls. When using rolls from different batch numbers then an experienced technician should verify beforehand if there are any disparities between the batch numbers as this could make an impact on the end result.

2. Storage

In general, rolls delivered from POLI-TAPE should never be stored vertically, they should be stored either upright or pendulously. Processing and storage should be in a cool, dry, sun protected room with a relative humidity from 50 – 55 % and room temperature from ca. 18 – 22°C.

Attention! UV-radiation and excessive humidity can affect the quality of the self-adhesive material and impact the end result.

3. Printing instructions

The surface composition and the file to be printed should be inspected with the profiling before every print. We recommend that due care is taken and to use cotton wool gloves when handling digital printing media to avoid any impurities or damage.

Due to the differing qualities of the film rolls (monomer-/polymer- calandered), the various settings of the printer and the control software should always be verified and adjusted. In addition check the product details concerning their respective applications (indoor / outdoor) and durability. To avoid any unexpected results, please visit our homepage (www.poli-tape.de) for complete technical information regarding your purchased product.

4. Drying Time

The inks require a certain drying time after every printing process before finalizing so that the contained solvents completely evaporate. In addition, before finishing, the freshly printed media should be properly dried to avoid any shrinkage of the graphic. POLI-TAPE recommends to dry the media widespread for ca. 48 hours.

If the graphic is laminated too early, it could happen that the solvents haven't completely evaporated which could influence the adhesion and durability of the product. Printed films which have not been sufficiently dried will contract during the drying process on the substrate after the application. It could also happen that the film peels away from the edges if the film has shrunk.

5. Lamination

It is advisable to laminate every inkjet print in order to maintain a long lasting high quality optical film. POLI-TAPE has various cold laminating films on offer in their product range. These films protect digital prints and photos against the influence of UV, dirt, humidity and abrasion. In addition, if combined, we recommend that only films from the same version are used (Monomeric PVC films on Monomeric PVC films and Polymeric PVC films on Polymeric PVC Films) because the components are aligned to match each other. POLI-TAPE recommends never to adjust the roll temperature higher than 30°C in order to avoid any deformation of the film. Furthermore, the film should be laminated without any tension.

6. Surface Treatment

POLI-TAPE offers diverse high quality special adhesives which can be used for almost all clean surfaces which are free from silicone, wax or grease. In addition, POLI-TAPE highly recommends that all surfaces are thoroughly cleansed with an Isopropanol mixture and dried afterwards with a suitable cloth before every application on painted surfaces or on tarpaulins. Other detergents are not recommended, because they could affect the varnish and influence the adhesion. If the detergents are not completely removed then gas cavities could develop between the surface and the film. For products made of polycarbonate and any other surfaces which have the tendency to produce cavities, POLI-TAPE suggests to bond a film with the surface 12 – 24 hours prior and to store at a minimum of 50°C. If gas cavities have formed then we suggest that either the material is stored for a longer period of time at room temperature or to perform heat treatment.

7. Bonding

POLI-TAPE recommends that material from the same batch number is always used for bonding. When applied dry, press a corner of the film onto the surface which is to be bonded, then spread the remaining film over the area with the help of a squeegee. The silicone paper can be completely removed before bonding small films. We do not recommend this when bonding large films, instead, the silicone paper should be removed piece for piece during bonding. The film should be pressed again a couple of hours after bonding to ensure optimal quality bonding. In order to avoid different colour effects, we recommend that the films are processed in the same running direction. If the films overlap, the film must be cut with a sharp straight edge by using a proper knife otherwise the film could peel off or misalign. There are many different surface foundations which the films can be used for the signage of vehicles. Attention should be given that there is never any tension when transferring the film but to constantly follow the profile. In addition, the overlapping area of the film shouldn't be digitally printed, otherwise the adhesive will come into contact with the solvent based inks.

This causes a migration of the solvents which on the other hand can influence the adhesion of the film. Furthermore, the edges of the film should overlap by minimum of 5 mm and maximum of 13 mm. POLI-TAPE recommends that only films from the same manufacturer and composition (Polymeric, Monomeric) are used.

Attention! If bonding films on insulating glass panes, pay intensified attention to the material selection because the glass could get damaged due to temperature variability.

8. Removability

In order to ensure a residue free removal of the film, the surrounding temperature as well as the ground temperature should be at least 20°C. With the help of a knife, carefully peel a corner away and at an angle of 180° peel the remaining film away. The use of hot blow dryers while removing the film will ease the procedure considerably. Remaining adhesive residues which mostly incur from very old films can be removed easily with varnish thinner.

9. General Information

POLI-TAPE provides an individual list with recommended printers and ICC-Profiles on our website www.poli-tape.de

The following technical details are issued to the best of our knowledge, however, without any responsibility for results due to several different kinds of material and application processes. Therefore, we highly recommend that before every usage a test should be conducted on the original material.