

DigiSOL DS1000

Crystal Clear

UV printable polyester

Product description

A range of printable window films featuring high performance UV ink-jet receptive topcoatings which offer excellent ink adhesion. The polyester films in combination with the correct UV inks, ink deposit and UV cure produces high performance printed window graphics. The optically clear film and adhesive ensures perfect see-through vision when applied to glass.

Note: Products supplied with paper release liners will offer reduce clarity compared to films protected with polyester release liners.

Acclimatisation

Prior to printing store the material in the machine room for a minimum of 24 hours to acclimatise the product.

Printing

When initially evaluating the LINTEC EUROPE UV digital polyester range we recommended that you evaluate your digital printer, UV digital ink and curing in combination with the LINTEC EUROPE film to ensure good adhesion after optimum UV cure. It is recommended to carry out crosshatch / Sellotape adhesion and wet test (see important note 2). These tests should be carried out 24 hours after printing. Ideally each material should be profiled as there is not, as far as we are aware, a standard profile that can be used for these materials.

Ink deposit and cure

The amount of ink deposited onto the UV digital printable polyester should be the minimum amount of ink whilst still ensuring optimum print definition, saturation and performance. High coat weights of UV cured inks can cause issues with ensuring 100% cure of the ink. In general the higher the thickness the more brittle the ink will become leading to reduced scratch resistance. Large areas of high UV cured ink can shrink when exposed to the UV curing process resulting in permanent upcurl of the digital graphic. The bandwidth and intensity of UV light exposed to the UV cured ink should be regularly evaluated to ensure optimum cure (adhesion and scratch resistance) performance.

The representations of performance and suitability for use contained in this Data Sheet are meant only as a guide. Since only the user is aware of the specific conditions in which the product is to be used, it is the user's responsibility to determine whether the product is suitable for that intended use. Copyright 1995

Important notes:

- 1) If the ink is not cured correctly it can introduce up-curl or 'wavy edges' into the film. As the film is designed to be wet applied any curl can cause application issues as adhesive strength is temporarily dramatically reduced when applied using this method. Any product curl at point of application can cause delamination of the film from the glass due to the low adhesion level. It is therefore essential to evaluate all profiles and drying conditions as detailed within this document to ensure good lay-flat properties after printing.
- 2) Some UV cured inks are more re-active to water than other OEM supplied inks. It is essential to ensure that the ink is resistant to water when fully cured as it is very likely to be applied and cleaned with water. We recommend that the following test is carried out to confirm the capability of your inks and UV curing process in combination with the film:
 - 2.1) Print the UV ink onto the material and ensure that it is fully cured prior to testing.
 - 2.2) 48 hours after print and cure submerge the printed sample into a beaker of water for 10 minutes.
 - 2.3) Remove the printed sample from the beaker and scratch with your finger to determine if the ink has softened.
 - 2.4) If the ink scratches off easily with your finger you should evaluate the ink and cure.

Printed material handling

Once the print is dried the material should ideally be hung or left on a flat table to post cure. At this time the ink surface should be exposed to the air and not be in contact with another surface. We recommend 48 hours for full post cure before installation. Ensure the ink is fully cured before rewinding. If the ink is not fully cured there is a risk of 'blocking' where the uncured ink bonds to the reverse of the release liner when it is rewound onto a roll.

Packaging for transportation

The media should be wound around a tube with ink out facing, poly bagged and then boxed.

Application

- a The printed materials should be trimmed with new sharp cutting blade.
- b The area where the film is to be applied should be clean and free of any contamination such as silicone.
- c The printed film should be applied using application fluid. We recommend the use of Johnsons baby shampoo and water. A few drops of soap per litre of water is normally sufficient but it is very dependent upon application temperatures, graphic size, experience of application personnel (time taken to apply) etc. For more working time increase the volume of the soap. In cold weather the soap should be reduced or replaced with an alcohol based solution to accelerate the drying process.



All Print Supplies