



## TECHNICAL DATA SHEET - LAMINATE - PERMANENT ADHESIVE

### PCFORGED

Film composed of a 110- $\mu$ m, clear, structured, cast PVC, which is coated with a pressure-sensitive acrylic adhesive. Designed to be cold laminated on mass-coloured or digital printing films; it can also be directly applied to smooth 2D or moderated 3D surfaces. Forged carbon surface finish.

#### **FILM FEATURES:**

|   | <u>Indicative value</u> |                 |
|---|-------------------------|-----------------|
|   | <u>Average value</u>    | <u>Standard</u> |
| • Thickness ( $\mu$ m):                       | 110                     |                 |
| • Tensile strength (N/25 mm):                 | min. 15                 | HEXNFX41031     |
| • Elongation at break (%):                    | min. 50                 | HEXNFX41031     |
| • Shrinkage 168 hours at 70 °C (158 °F) (mm): | < 0.8                   | HEXRET001       |

#### **LINER:**

- Silicone-coated PE paper 145 g/m<sup>2</sup>, with grey "THE CAST by HEXIS" print.
- Stable under hygrometric variations.

#### **ADHESIVE PROPERTIES:**

(Measured average values at publication of the technical data sheet)

|   | <u>Average value</u> | <u>Standard</u> |
|---|----------------------|-----------------|
| • Peel strength test 180° on glass (N/25 mm): |                      | HEXFTM001       |
| after 20 minutes of application               | 14                   |                 |
| after 24 hours of application                 | 16                   |                 |
| • Initial tack (N/25 mm):                     | 19                   | HEXFTM009       |
| • Release (N/25 mm):                          | 0.5                  | HEXFTM003       |

- Resistance to solvents: the adhesive is resistant to most chemicals (alcohol, diluted acids, oils).

#### **ADHESIVE:**

- Solvent-based acrylic adhesive.
- Immediate and permanent adhesion after 24 hours of contact.
- Dry application.

## **USER'S INSTRUCTIONS:**

- UV protection.
- For modifying/improving/protecting:
  - a plotter or wrap vinyl: only apply the PCFORGED film to unstructured films using a cold laminator or via direct application. The compound can be cut using a plotter, except in combination with a full wrap film. After cutting, it is possible to transfer with the HEX860 tape.
  - a digital printing film: only apply the PCFORGED film to solvent, eco-solvent, latex or UV inkjet printed films.
  - any other type of substrate: only apply to a surface that is in good condition or properly prepared.

*Due to the wide variety of existing substrates, the application of vinyl to an unsuitable and/or not adequately prepared surface or laminate may result in media lifting from the substrate, or damage to the substrate when the film is withdrawn. The application and removal of the vinyl are at the judgement and risk of the installer. HEXIS will not, under any circumstances, be liable for any damages or deteriorations caused by the installation or removal of a vinyl film.*

- Recommended minimum application temperature: +10 °C (+50 °F).
- Operating temperature range: from -40 °C to +90 °C (-40 °F to +194 °F).
- For film cleaning, only use a non-abrasive sponge or soft cloth and soapy water.

## **OPERATING RECOMMENDATIONS:**

- Before applying this laminate to a HEXIS digital printing film, which has been printed with solvent inks, it is recommended to respect the following optimal drying time for the inks:
  - 48 hours if the printed film is cast,
  - 24 hours if the printed film is calendered.
- For more information on the application method of the PCFORGED film, please refer to the Application Guide on the "Professionals" pages, category "Laminates" on the site [www.hexis-graphics.com](http://www.hexis-graphics.com).

## **STORAGE:**

- Shelf life (before application):

The shelf life of this film is 1 year when stored upright in its original packaging in a dust-free environment at a temperature ranging from +15 °C to +25 °C (+59 °F to +77 °F) with relative humidity of 50 %.

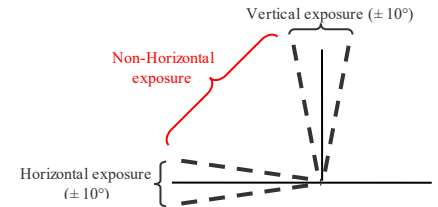
**DURABILITY:** (Central European climate)

- Vertical outdoor exposure, upon substrate:  
Without mechanical stress: up to 3\* years.  
With mechanical stress: depends on the type and frequency of the stresses.

\*Time during which the film retains a correct surface finish, from a conventional viewing distance. (A slight and gradual change in colour and gloss is natural and is an inevitable and natural phenomenon inherent in the natural breakdown of the materials).

Note: The durability indicated in this document:

- concerns only the laminate and not the finished visual or graphic.
- is inherent to an upright position of  $\pm 10^\circ$  and to the product's geographical exposure position. All other positions accentuate the climatic shocks and promote the appearance of an alteration of the gloss or even a slight dusting. Southern exposure, with a  $45^\circ$  inclination can divide the durability of the film by 2, and horizontal exposure by 2.8. Application to the vehicle bonnet is particularly severe, due to the horizontal exposure and the heat from the engine.
- is confirmed by UV ageing tests and vertical natural weathering.



- Indoor exposure, upon substrate: up to 5 years.

*This durability may vary depending on frequency and type of cleaning / mechanical stress (friction, impacts etc.) to which the film is exposed.*

**NOTES:**

Due to the great variety of substrates and the growing number of new applications, the installer must check the suitability of the medium for each application. The measuring methods for the standards quoted above served as the basis for the development of our own measuring methods which are available on request. Please feel free to contact us to get the latest instructions in use.

All the published information is based on measurements regularly performed in the laboratory. It does not however constitute a binding guarantee. The seller cannot be held liable for indirectly related damages and assumes no liability for claims that are higher than the replacement value of the purchased product. All specifications are subject to potential changes without prior notice. Our specifications are automatically updated on our website [www.hexis-graphics.com](http://www.hexis-graphics.com).