TECHNICAL DATA SHEET - DIGITAL PRINTING - LAMINATE - PERMANENT ADHESIVE

PC500M

A 50-µm, transparent, UV-treated polyurethane film, which is coated with a pressure-sensitive acrylic adhesive. Product developed for cold-laminating HEXIS digital printing films. This laminate protects prints while providing them with enhanced mechanical resistance to abrasion compared with standard PVC models. Matt surface finish.

FILM FEATURES:

	Indicative value	
• Thickness (µm):	50	
	Average values	**Standard**
• Tensile strength (N/25 mm):	min. 50	HEXNFX41031
• Elongation at break (%):	min. 100	HEXNFX41031
• Shrinkage 168 hours at 70 °C (158 °F) (mm):	< 0.6	HEXRET001
• UV absorption (%):	≥ 90	NF EN 410

LINER:

- Silicone-coated PE paper 145 g/m², with grey "THE CAST by HEXIS" print.
- Stable under hygrometric variations.

ADHESIVE PROPERTIES:

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

	Average values	Standard
• Peel strength test 180° on glass (N/25 mm):		HEXFTM001
after 20 minutes of application	13	
after 24 hours of application	14	
• Initial tack (N/25 mm):	12	HEXFTM009
• Release (N/25 mm):	0.1	HEXFTM003

ADHESIVE:

- Solvent-based acrylic adhesive.
- Immediate and permanent adhesion.

USER'S INSTRUCTIONS:

- Protection of digital printing films.
- Using this protective film also enables you to modify the product's visual aspect by providing it with a matt surface finish.
- UV protection.
- Recommended minimum application temperature: +10 °C (+50 °F).
- Operating temperature range: -40 °C to +90 °C (-40 °F to +194 °F).
- To clean the film, only use a non-abrasive sponge or soft cloth with soapy water.
- Due to its matt surface finish, cleaning may be slightly longer / more vigorous than that of a film with glossy surface finish.
- In the case of painted substrates, self-adhesive media must only be applied to undamaged original paintwork. If the paintwork is not original and/or damaged, the application and the removal are at the judgement and risk of the installer.

OPERATING RECOMMENDATIONS:

- Optimal drying time for the inks before laminating, coating or further processing of a HEXIS digital printing film is:
  - 48 hours for a cast film;
  - 24 hours for a calendered film.

STORAGE:

- Shelf life (before application):

  The shelf life of this film is one 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 %.

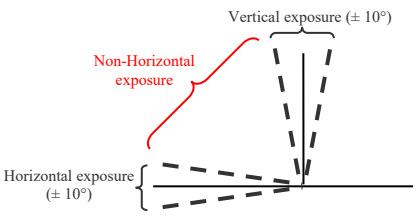
DURABILITY: (Central European climate)

- Vertical outdoor exposure:
  Without mechanical stress: up to 7* 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 a natural and inevitable 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 ± 10° and to the product's geographical exposure position. Any other position accentuates climatic influences and an alteration in gloss or colour, or even a slight dusting may appear. Southern exposure, with a 45° inclination may 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 outdoor weathering.



- Vertical indoor exposure:
  Up to 9 years (on surfaces or areas not subject to frequent handling or high visitor frequency).

A film applied to surfaces exposed to mechanical stress will be subject to repeated abrasion that will reduce more or less rapidly its lifespan (change of appearance, peeling off, etc.).