



## TECHNICAL DATA SHEET - PLOTTER VINYL

### HXS5000

A 65- $\mu$ m high performance, calendered, polymeric PVC film, which is coated with a pressure-sensitive, solvent-based, acrylic adhesive. Structured adhesive for faster application and air evacuation. Matt or glossy surface finish.

#### **FILM FEATURES:**

	<u>Indicative value</u>	
• Thickness ( $\mu$ m):	65	
	<u>Average value</u>	<u>Standard</u>
• Tensile strength (N/25 mm):	min. 35	HEXNFX41021
• Elongation at break (%):	min. 100	HEXNFX41021
• Shrinkage 168 hours at 70 °C (158 °F) (mm):	< 0.6	HEXRET001

#### **LINER:**

- Silicone-coated and embossed PE paper 145 g/m<sup>2</sup>, with light grey HEXIS print.
- Stable under hygrometric variations.

#### **ADHESIVE PROPERTIES:**

	<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	17	
• Initial tack (N/25 mm):	18	HEXFTM009
• Release (N/25 mm):	0.2	HEXFTM003
• Resistance to solvents: the adhesive is resistant to most chemicals (alcohol, petrol, diluted acids, oils, fuels).		

#### **ADHESIVE:**

- Solvent-based acrylic adhesive.
- Immediate and permanent adhesion, optimal after 24 hours of contact.
- Structured adhesive for faster application and air evacuation.

## **USER'S INSTRUCTIONS:**

- The films should preferably be stored in the same environment as the cutting station.
- If the pressure during cutting is too high, the protective liner (silicone-coated paper) may slightly crack causing adhesive bleeding. This would make the weeding process more difficult and the paper liner could even peel off in the cutting area. In any case, it is recommended to weed the material immediately after the cutting.
- Recommended minimum application temperature: +10 °C (+50 °F).
- Operating temperature range: from -40 °C to +90 °C (-40 °F to +194 °F).
- Dry application.

*It is mandatory to use the so-called "dry" application method due to its HEX'PRESS liner. This technology means you can easily reposition the film on the substrate during application, while not excluding the squeegeeing step for optimal adhesion of the film to the substrate.*

- Possibility of transferring the HXS5000 films using the film tapes Hex904, Hex905, Hex910, Hex915, Hex930, Hex955 or Hex750.
- Adhesion to glass, steel, aluminium, PVC, melamine, etc. except grain substrates or substrates coated with acrylic paint.
- In the case of an already painted substrate, 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:**

- The colour of the films is controlled by HEXIS in order to ensure faithful reproduction of their colour tints. Nevertheless, in the case that your project requires the use of several rolls of the same colour reference, HEXIS recommend using only a single batch number of each reference.

## **STORAGE:**

- Shelf life (before application):

The shelf life of this film is 2 years when stored unopened in its original packaging at a temperature ranging from +15 °C to +25 °C (+59 °F to +77 °F) with relative humidity between 30 % and 70 %.

## **INDICATIVE DURABILITIES:**

- The pigmentation (colour) of the PVC affects the stability duration of the dyes. An estimate of such a durability is confirmed by accelerated UV ageing tests performed on the HXS5000 films and by outdoor weathering.

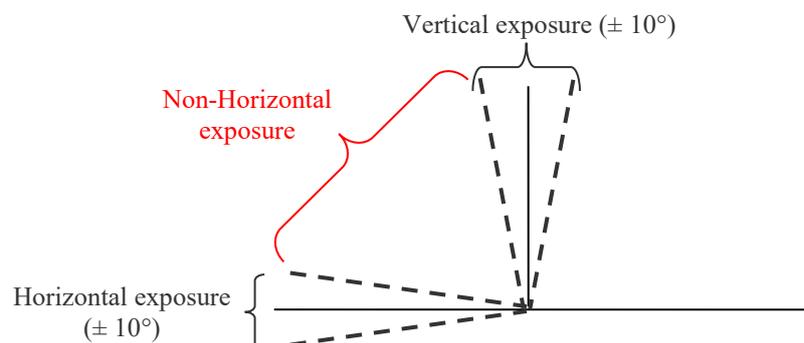
Dominant colour	Max. indicative durability (years) <sup>(1)</sup> Vertical exposure ( $\pm 10^\circ$ ) Central European climate
Glossy white, black	10
Colours, other tints	8
Metallic colours	4

**Chart 1:** Vertical durabilities<sup>(1)</sup> Central Europe

- The durabilities indicated below are obtained particularly in vertical ( $\pm 10^\circ$ ) outdoor exposure. The conditions of durability indicated in Chart 1 are inherent to this position up to a few degrees. Other positions accentuate climatic influences and an alteration in gloss, colour or even a slight dusting may appear. Application to the vehicle bonnet is particularly severe, due to the horizontal exposure and the heat from the engine.
- To estimate the durabilities for non-vertical exposure, divide the durabilities in Chart 1 by the factors given in Chart 2.

Exposure	Dividing factor <sup>(1)</sup> Central European climate
Non-vertical exposure	2
Horizontal exposure ( $\pm 10^\circ$ )	2.8

**Chart 2:** Dividing factor



- The real durability of a product depends on a large number of parameters, including, among others, the quality and preparation of the substrate, exposure (environment, climate, exposure angle), graphics maintenance, and degree of pollution.

*To find the indicative durabilities of the films for the country of exposure, please refer to the "Conversion rules for indicative durabilities according to geographical area" chart available under Durability in the "Professionals" pages of our website at [www.hexis-graphics.com](http://www.hexis-graphics.com).*

**NOTES:**

(1) The indications of durability noted in this document do not constitute a binding guarantee. They are an estimate of the 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 an unavoidable and a natural phenomenon inherent to the natural breakdown of the materials.

Due to the great variety of substrates and the growing number of new applications, the installer must check the suitability of the media 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).