



TECHNICAL DATA SHEET - SIGN VINYLS **HXS5000**

A 65-µm 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:

		Indicative value	
•	Thickness (µm):	65	
		Average values	<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/m², with light grey HEXIS print.
- Stable under hygrometric variations.

ADHESIVE PROPERTIES:

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

		Average values	<u>Standard</u>
•	Peel strength test 180° on glass (N/25 mm):		HEXFTM001
	after 20 minutes of application	13	
	after 24 hours of application	15	
•	Initial tack (N/25 mm):	16	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.
- Minimum recommended application temperature: +10 °C (+50 °F).
- Operating temperature range: -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.

- For a uniform visual aspect, it is necessary to keep the same film application direction in order to ensure colour homogeneity according to the viewing angle.
- Possibility of transferring the HXS5000 films using the film tapes Hex904, Hex905, Hex910, Hex915, Hex930 or Hex750.
- Using tape or self-adhesive film on the HXS5433B surface will modify its appearance.

When removing the tape or self-adhesive film, sequins are torn off from the film surface and leave a visible mark.

- 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 $^{\circ}$ C to 25 $^{\circ}$ C (+59 $^{\circ}$ F to +77 $^{\circ}$ F) with relative humidity between 30 $^{\circ}$ 8 and 70 $^{\circ}$ 8.

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 natural outdoor weathering.

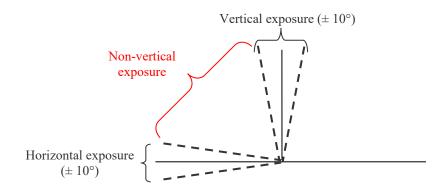
Dominant colour	Max. indicative durability (years) ⁽¹⁾ Vertical exposure (± 10°) Central European climate
Glossy white, black	10
Colours, other tints	8
Metallic colours	4

 $\textbf{Chart I:} \ \mathsf{Vertical} \ \mathsf{durabilities}^{(1)} \ \mathsf{Central} \ \mathsf{Europe}$

- The results indicated below are obtained specifically in vertical (± 10°) outdoor exposure. The conditions of durability indicated in Chart I are inherent to this position up to a few degrees. Other positions accentuate climatic influences and an alteration in gloss or 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 I by the factors given in Chart 2.

Exposure	Dividing factor ⁽¹⁾ Central European climate
Non-vertical exposure	2
Horizontal exposure (± 10°)	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.

NOTES:

A slight and gradual change in colour and gloss is a natural and inevitable phenomenon inherent in 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.

⁽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.