



## TECHNICAL DATA SHEET – SIGN VINYL – ETCHED GLASS

### HX5DEPM – HX5DP03

Film composed of a 3.15-mil (0.08 mm), polymeric calendered, cadmium-free PVC which is coated with a pressure-sensitive, acrylic adhesive. Structured adhesive for faster application and easier air egress. Matt etched glass surface finish.

#### **FILM FEATURES:**

	<u>Average values</u>	<u>Standard</u>
Thickness:	3.15 mil 0.08 mm	
Tensile strength:	min. 7.74 lb./in. min. 35 N/25 mm	HEXNFX41021
Elongation at break:	min. 100 %	HEXNFX41021
Dimensional stability after 168 hours at 158 °F (70 °C):	< 0.016 inch < 0.4 mm	HEXRET001

#### **LINER:**

- 98# embossed and silicone-coated PE paper with light grey HEXIS print
- Stable under hygrometric variations

#### **ADHESIVE FEATURES:**

(Average values measured while revising technical data sheet)

	<u>Average values</u>	<u>Standard</u>
180° peel strength test on glass:		
after 20 min. of application	4.20 lb./in. 19 N/25 mm	HEXFTM001
after 24 hours of application	5.31 lb./in. 24 N/25 mm	
Initial tack	4.43 lb./in. 20 N/25 mm	HEXFTM009
Release	0.08 lb./in. 0.35 N/25 mm	HEXFTM003

- Solvent resistance: the adhesive is resistant to most chemical agents (alcohol, petrol, diluted acids, oils, fuels).

**ADHESIVE:**

- Solvent-based, acrylic adhesive
- Immediate and permanent adhesion; best after 24 hours of film application
- Structured adhesive for faster application and easier air egress

**USER'S INSTRUCTIONS:**

- Application to untreated surfaces, free of any traces of pollutants (dust, grease, wax, silicone...) which were cleaned with a soapy liquid with no anti-adherent additives.

*Please pay particular attention to the cleaning of angles and edges of the glass surfaces in order to let the film properly adhere to the surface.*

- Dry application method

*Due to its HEX'Press liner, the film must solely be applied according to the "dry" application method. This technology allows an easy repositioning of the vinyl on the substrate during application. However, the film must be firmly squeegeed to achieve optimum adhesion on the substrate.*

- The hygrometry has an influence on the application quality.

*Heat cold surfaces before application to avoid condensation between the glass and the self-adhesive film.*

- Minimum application temperature recommended: +50 °F (+10 °C)

*The minimum application temperature must be respected for both the ambient and substrate temperature. In a cold environment, the transfer tape should be left on longer before its removal because several days are required before achieving the final adhesion of the vinyl.*

- Operating temperature range solely: from -40 °F to +194 °F (from -40 °C to +90 °C)
- To ease the application, HEXIS can provide you with a line of accessories consisting of different types of squeegees, from very soft to very hard ones (plastic or felt).
- The squeegee must be strongly applied to the edges.
- The use of a transfer film or paper will allow you to firmly apply the squeegee on the entire surface of the graphics to be transferred.

*If you use transfer tape, we recommend the item HEX915.*

- In the case of already painted substrates, self-adhesive media must only be applied onto undamaged original paintwork. If the paintwork is not the original and/or is damaged, the application and the removal are at the installer's own judgement and own risk.

**RECOMMENDATIONS FOR USE:**

- The films should preferably be stored under the same environmental conditions as the plotter.
- If the pressure is too high, the protective liner (silicone-coated paper) could slightly crack and the adhesive could penetrate. This would make the weeding process more difficult. In any case, it is recommended to weed the material right after cutting.

- The color of the films is controlled by HEXIS in order to ensure faithful reproduction of the color tints. Nevertheless, should your project require the use of several rolls of a single color reference, HEXIS recommends that you use only one batch number of this color.
- In order to improve the outdoor durability of the etched glass film, use a sealing seam.
- For further information on the application method of the HX5DEPM/HX5DP03 films, please refer to the Application Guide available on the "Professionals" pages, category "Sign vinyl" on our website at [www.hexis-graphics.com](http://www.hexis-graphics.com).

## **STORAGE:**

- Shelf life (before application):

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

## **DURABILITY:**

- The color pigments of the PVC influence the stability duration of colorings. These durabilities are obtained from aging tests performed on the polymers of the etched glass film through UV rays and outdoor exposure; the durations indicated below are those from which a gradual change or impairment of the appearance is noticeable.

Color	Indicative durability (years)
HX5DEPM	8
HX5DP03	2.5

- These results are obtained from vertical outdoor exposure. The stated durability conditions are inherent to this position up to some degrees. Any other position accentuates the climatic impacts and may further the appearance of gloss and color alteration, and even a slight dusting phenomenon (outdoors).
- A Southern exposure at a 45° angle can reduce by half the durability of the film compared to the values written in the table above.

### **NOTES:**

Because of the great variety of substrates and the growing number of new applications, the installer must check the suitability of the media for each application. HEXIS cannot be held liable for any misuse and / or impairment caused to the surface, during the product's life span (from application to removal), in case of incompatibility between the product and the substrate.

The measuring methods for the standards quoted above served as 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 information released originates from laboratory measurements on a regular basis. However, it does not constitute a binding warranty. The seller is not held accountable for indirectly related damages beyond the replacement value of the purchased product. All specifications are subject to potential changes without prior notice. Updates of our specifications are automatically available on our website at [www.hexis-graphics.com](http://www.hexis-graphics.com).