



TECHNICAL DATA SHEET – SIGN VINYL – ETCHED GLASS

HX5DEPM – HX5DP03

Film composed of a 3.15-mil (0.08 mm) cadmium-free, calendered, polymeric PVC, which is coated with a pressure-sensitive acrylic adhesive. Structured adhesive for faster application and 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
Shrinkage after 168 hours at 158 °F (70 °C):	< 0.016 inch < 0.4 mm	HEXRET001

LINER:

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

ADHESIVE FEATURES:

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

	<u>Average values</u>	<u>Standard</u>
Peel strength test 180° on glass:		
after 20 min. of application	4.43 lb./in. 20 N/25 mm	HEXFTM001
after 24 hours of application	5.09 lb./in. 23 N/25 mm	
Initial tack	4.87 lb./in. 22 N/25 mm	HEXFTM009
Release	0.04 lb./in. 0.2 N/25 mm	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 egress.

USER'S INSTRUCTIONS:

- Apply to an untreated surface, free from all traces of contaminants (dust, grease, wax, silicone etc.) and cleaned with a soapy liquid without anti-adhesive additives.

Particular care must be taken to clean the angles and periphery of the glass surfaces so as to allow the film to adhere properly to the surface.

- Dry application.

It is mandatory to apply the so-called "dry" application method, due to its liner HEX'PRESS. 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.

- Hygrometry influences the quality of the application.

On a cold window condensation may occur between the window and the adhesive film; it is therefore advisable to heat the substrate.

- Recommended minimum application temperature: +50 °F (+10 °C).

The minimum temperature must be complied with both in terms of ambient and substrate temperature. In a cold environment the transfer tape should be left on longer before its removal and several days are needed to complete the final adhesion of the vinyl.

- Range of film operating temperatures exclusively: -40 °F to +194 °F (-40 °C to +90 °C).
- To facilitate application, HEXIS has several types of squeegees in its range of accessories, ranging from softer to harder (plastic or felt).
- Firmly press the squeegee over all the edges.
- The film or paper transfer tape allows you to press the squeegee firmly over the entire surface of the graphic to be transferred.

If using a transfer film, HEX915 tape is recommended.

- In the case of already painted substrate, self-adhesive media must only be applied onto 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 films should preferably be stored in the same environment as the cutting station.
- If the pressure 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.

- The color of the films is monitored by HEXIS to ensure a faithful reproduction of their tints. Nevertheless, in the case where your project requires the use of several rolls of one same color reference, HEXIS recommends using a single batch number of this reference.
- To enhance the longevity of the etched glass outdoors only, you can use a seal.
- For more information on the application method of the films HX5DEPM – HX5DP03, please refer to the Application Guide available on the "Professionals" pages, category "Plotter vinyls" on our site www.hexis-graphics.com.

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 +59 °F to +77 °F (+15 °C to +25 °C) with relative humidity between 30 % and 70 %.

DURABILITY:

- The pigmentation (color) of the PVC affects the stability duration of the dyes. These resistances are confirmed by UV ageing tests performed on ETCHED GLASS polymers and by natural exposure; the durations given are the periods during which the surface finish is expected to be free from any gradual reduction or modification.

Color	Indicative durability (years)
HX5DEPM	8
HX5DP03	2.5

- These results were obtained from a vertical outdoor exposure and the durability conditions indicated are inherent to this position up to a few degrees. Other positions accentuate climatic influences and an alteration in gloss, color or even a slight dusting may appear (outdoors).
- Southern exposure with a 45° inclination can divide the durability of the film by 2, compared to the values indicated in the tables below.

NOTES:

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. HEXIS cannot be held liable for misuse and/or damage caused to the substrate throughout the life of the product (from application to removal), in the case of inconsistencies 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 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.