



## TECHNICAL DATA SHEET - PROTECTIVE FILM DFENCEONEXM

DFENCEONEXM is a transparent adhesive-coated film, which is self-healing at ambient temperature and particularly suitable for protecting a car's interior surfaces (excluding textiles and surfaces incompatible with wet application). Its excellent shock-absorbing properties protect areas such as dashboards, door handles, window controls, touch screens etc. against stains, abrasion, and scratches caused by keys, nails, jewellery, etc. The film can also be used to protect the external vehicle's car body against chips caused by stones, insects, car doors, washing brushes, etc. Matt surface finish.

### **FILM FEATURES:**

	<u>Indicative value</u>	
• Total thickness (film + adhesive) (µm):	130 (5.1 mil) ± 10 %	
	<u>Average values</u>	<u>Standard</u>
• Tensile strength (N/25 mm):	> 40	HEXNFX41021
• Elongation at break (%):	> 200	HEXNFX41021
• Shrinkage 168 hours at 70 °C (158 °F) (mm):	< 0.2	HEXRET001

### **LINER:**

- Silicone-coated PET liner.

### **ADHESIVE PROPERTIES:**

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

	<u>Average values</u>	<u>Standard</u>
• Peel strength test 180° (N/25 mm):		HEXFTM001
after 20 minutes of application:	15	
after 24 hours of application:	21	
• Initial tack (N/25 mm):	12	HEXFTM009
• Release (N/25 mm):	0.2	HEXFTM003

### **ADHESIVE:**

- Solvent-based, acrylic adhesive.
- Immediate and permanent adhesion, optimal after 24 hours of contact.

## **USER'S INSTRUCTIONS:**

- The DFENCEONEXM film is intended, among others, for the protection of:
  - automobile interior components (excluding textiles and surfaces incompatible with wet application),
  - interior and exterior vehicle car bodies against everyday damage (key, jewellery and nail scratches, shoes, etc.),
  - full wrap films (HX20000, non-structured HX30000 and HX30SCH00) used for smooth and basic full wraps without relief decoration.

*The application of DFENCEONEXM to full wrap films is at the customer's judgement. HEXIS recommend the use of pre-cut DFENCEONEXM for this particular application. As the adhesion of DFENCEONEXM is permanent, its removal from a full wrap film can damage the latter. HEXIS decline any responsibility in the case of deterioration of a full wrap film caused by the application and removal of DFENCEONEXM.*

- Self-healing properties of the film at ambient temperatures: This phenomenon of reabsorbing scratches accelerates especially as the temperature increases.
- Recommended minimum application temperature: +10 °C (+50 °F). Apply preferably between +15 °C and +35 °C (+59 °F to +95 °F).
- Operating temperature range: -40 °C à +90 °C (-40 °F to +194 °F).
- Cut the film to the size of the part to be wrapped, allowing +10 cm (4 in.) of extra margin.

*The remaining film must be stored on its original core (do not cut the rolls into several lengths or widths, do not repackage the product); the roll must be closed immediately and properly (masking tape or roll-collars) after use in order to preserve all its qualities.*

- Apply wet.

*When applying the film inside the vehicle, it is imperative to properly protect all moisture-sensitive surfaces that may be exposed to the application liquids. It is recommended to use liquids sparingly inside the vehicle and therefore the film should preferably be moistened and not the surface to be covered. HEXIS cannot be held liable for any damage to the vehicle following the use of liquids.*

- Apply to a surface that is clean and free from any traces of contaminants (dust, grease, wax, silicone, etc.).

*Particular care must be taken to clean the angles and periphery of the target surfaces in order to enable the film to adhere properly to the surface.*

- 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:**

- Prior to any film application, it is recommended to verify the compatibility of the surfaced to be covered with the application liquids or products used during film removal to clear adhesive residues (such as SHAGREMOV).

*HEXIS cannot be held liable for any damage to the vehicle following the use of liquids.*

- To facilitate application, HEXIS have several types of squeegees in their range of accessories, ranging from softer to harder (plastic or felt).

**STORAGE:**

- Shelf life (before application):

The shelf life of this film is 1 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 a relative humidity of 50 %.

**DURABILITY:**

- Lifespan depends on the type of substrate, substrate preparation, exposure conditions and nature and frequency of the cleaning.

*For instance, it is estimated that a south-facing exposure will divide the durability by two. The same applies to a horizontal exposure. In addition, elevated temperatures (above +50 °C) (+122 °F) or pollution significantly reduce this durability.*

- Vertical exposure, Central European climate:  
up to 7 years (under normal road use conditions).

*Applied to a full wrap film with a durability of less than 7 years, DFENCEONEXM will increase the durability against yellowing and cracking of the full wrap film by up to 1 year (within the limit of the DFENCEONEXM durability).*

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

**NOTES:**

Due to the great variety of substrates and the growing number of new applications, the installer must check the suitability of the medium for each application. In case of doubt, request an expert evaluation of the compatibility of the film and the glass in question. All of the published information is based on measurements regularly performed in the laboratory. The published information 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).