DFENCEXTRM

TRANSPARENT

PRODUCT DESCRIPTION:

DFENCEXTRM is a transparent, adhesive-coated film, which is self-healing at ambient temperature and specially developed for protecting the front side of vehicles. This film, which is thicker than Bodyfence or BodyfenceX, provides a higher level of car body protection against chips caused by stones, insects, washing brushes, etc**.** Glossy surface finish.

FILM FEATURES:

· Total thickness (film + adhesive)	(Indicative value) **210 µm (8.3 mil) ± 10 %**	
· Tensile strength	(Average values) **> 100 N/25 mm**	Method **HEXNFX41021**
· Elongation at break	(Average values) **> 350 %**	Method **HEXNFX41021**
· Shrinkage 168 hours at 70 ℃ (158 ℉)	(Average values) **< 0.2 mm**	Method **HEXRET001**

LINER:

· Silicone-coated PET liner.

ADHESIVE PROPERTIES:

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

· Peel strength test at 180°

after 20 minutes of application	(Average values) **17 N/25 mm**	Method **HEXFTM001**
after 24 hours of application	(Average values) **20 N/25 mm**	Method **HEXFTM001**
· Initial tack	(Average values) **11 N/25 mm**	Method **HEXFTM009**
· Release	(Average values) **0.1 N/25 mm**	Method **HEXFTM003**

ADHESIVE:

· Solvent-based acrylic adhesive.

· Immediate and permanent adhesion, optimal after 24 hours of contact.

USER'S INSTRUCTIONS:

· Wet application method

· Recommended minimum application temperature: +10 ℃ (+50 ℉) Apply preferably between +15 ℃ and +35 ℃ (+59 ℉ and +95 ℉).

· Operating temperature range: -40 ℃ to +90 ℃ (-40 ℉ to +194 ℉)

The DFENCEXTRM film is intended for vehicle body protection. It can also serve as a protection system for full wrap films (HX20000, non-structured HX30000 and HX30SCH00) used for smooth and basic full-wraps without relief decoration.

The application of DFENCEXTRM to full wrap films is at the customer's judgement. HEXIS recommend the use of pre-cut DFENCEXTRM film for this particular application. As the adhesion of DFENCEXTRM 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 DFENCEXTRM.

- **Self-healing properties of the film at ambient temperatures: This phenomenon of reabsorbing scratches accelerates especially as the temperature increases.**
- **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 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:

- Conformable product developed for protecting bodywork parts (underbody, painted front bumpers and rear-view mirror casings) that are particularly exposed to the impact of stones, insects, etc.
- Excellent protection against vandalism (key scratches).
- To facilitate application, HEXIS have several types of squeegees in their range of accessories, ranging from softer to harder (plastic or felt).
- For more information on the application method of the DFENCEXTRM film, please refer to its Application Guide available under the «Professionals» heading, in the «Solar and safety films" category on our website www.hexis-graphics.com.

STORAGE:

Storage period before use
1 year

Storage temperature
+15 °C to +25 °C (+59 °F to +77 °F)

Relative humidity during storage
with relative humidity of 50 %

Storage area
in a dust-free environment

Storage method before use
in its original packaging

Orientation of rolls before use
vertically

DURABILITY: (Central European climate)

- Vertical exposure:
  Up to 10 years (under normal road use conditions).

Applied to a full wrap film with a durability of less than 10 years, DFENCEXTRM will increase the durability against yellowing and cracking of the full wrap film by up to 1 year (within the limit of the DFENCEXTRM 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.

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.

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. 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 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.