



APPLICATION GUIDE

Protection Film

CARPROTECT

REQUIRED ACCESSORIES

- > PULVITRE vaporiser (11 litres)
- > A 1 litre vaporiser
- > MARBLEU soft Teflon 4" squeegee
- > Electric heat gun
- > Laser thermometer
- > CUTVITRE Olfa snap-off blade knife
- > CUTLAME replacement snap-off blades
- > HEXIS'O surface cleaning agent
- ND45 strong cleaner and degreaser
- > CLEAN HEXIS degreaser
- > Methylated spirit
- > Soft cloth

STORE ROLLS AT RECOMMENDED CONDITIONS

Keep the film away from sources of heat (radiators, direct exposure to sunlight...): the ideal storage temperature is between 15°C and 25°C (59°F and 77°F) with 50% relative humidity.

Store the films in their original packing - the rolls are wrapped in tight polythene bags and suspended in their packing cartons by square end pieces to avoid crushing of the roll by its own weight - and in a dry place.

Always store rolls in a horizontal position.



CHARACTERISTICS

The CARPROTECT consists of a $150\mu m$ (6mil) or $300\mu m$ (12mil) clear self-adhesive film, specially engineered for the protection of vehicle body panels. Because of its excellent crash resistance it protects all vehicles against chipping, insect debris, minor impacts, car wash brushes etc.

It is also an excellent protection against vandalism.

PREPARING THE TARGET SURFACE

CARPROTECT films can be applied on any vehicle body panel provided the target surface is clean, smooth, non-porous and without any traces of oil, grease, wax, silicone or other contaminating agents. In order to guard against all eventualities, always assume that the substrate is contaminated and requires cleaning.

Do not forget to carry out a preliminary test in a small inconspicuous area to check that the substrate does not deteriorate.

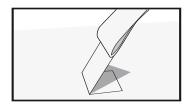
Always refer to the technical data sheets which can be found on our website www.hexisgroup.com.

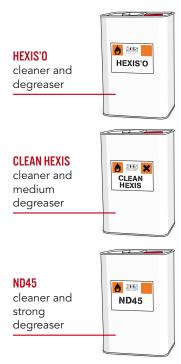
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Application methods are based on the manufacturer's experience and are not restrictive. To ease application comply with recommendations. HEXIS also offers training sessions to enable professionals to achieve optimum results







1. RECOMMENDATIONS

- > Optimum of the CARPROTECT is achieved after 24 hours of contact.
- > CARPROTECT is preferably applied on areas that are exposed to aggressions (front and rear bumpers, bonnet, doors...) however the film may be applied to the entire vehicle!

2. PRELIMINARY TEST OF THE SUBSTRATE

- Fresh paint must dry for at least 7 days at 25°C (77°F).
- > Older paint or paint that has become dusty or flaky must be sanded and restored before application and a tear-off test should be carried out.

2.1 Tear-off test

Using a self-adhesive tape of the type Tesa® 7476 or similar, apply on area of 2.5cm x 5cm (1in x 2in) plus some extra length to hold with fingers. Fold and tear off with a swift movement at a right angle to the surface. The adhesive tape should not show any traces. Repeat the test at different places.

> HEXIS provides on request samples of the 2.5cm x 5cm Tesa® tape.

2.2 Outgassing test

Use a 15cm x 15cm (6in x 6in) square of adhesive polyester or of film to be applied. Leave for 24 hours or 2 hours at 65°C (149°F). The appearance of bubbles indicates that the substrate has insufficiently outgassed. Repeat the test after a couple of days or else us the method described below.

2.3 Outgassing by flaming (polycarbonate, translucent or diffusing methacrylate, expanded PVC...) consists in modifying the surface tension of a substrate by swiping it with the flame of a gas burner. Proceed in even and fast sweeps, both horizontally and vertically over the entire surface of the substrate (use the blue tip of the flame).

Attention: do not stop the movement of the flame over a single spot for more than 1 second (risk of damage to the substrate). The film must be applied immediately as the effect of this type of gentle surface treatment disappears after a few minutes.

HEXIS is not liable for any bubbles due to outgassing.

3. CLEANING

Depending on the condition of the substrate there are three possible cleaning methods:

3.1 Clean surface appearance

Before applying the film on the target surface we recommend you clean the substrate with a gentle cleaning solution such as HEXIS'O. Dry with a clean lint free cloth...

3.2 Soiled surface appearance

Clean the substrate with a cloth soaked in CLEAN HEXIS cleaner degreaser and wipe dry before evaporation.

If the substrate is contaminated with persistent contaminating agents such as diesel petrol, tar or rubber, use a cloth soaked in HEXIS ND45 strong degreaser*. If necessary use a soft non-abrasive scraper beforehand.

In all cases wash the concerned areas with HEXIS'O solution.

* always check the compatibility of the ND45 with the substrate.

3.3 Special cases

Remember to adapt the methods of surface preparation to the type of surface and their condition. Thus, painted surfaces must be dry and hardened out, baked paints must have cooled down. Air dried paints or vehicle paints require 7 to 10 days of drying before the application of a film. In the case of bare metallic surfaces clean the substrate with a cloth soaked in HEXIS'O solution.

The nature of the film to be applied will also determine any particular treatments (cf. technical data sheets available on www.hexisgroup.com).

Carefully wipe the surface after cleaning.

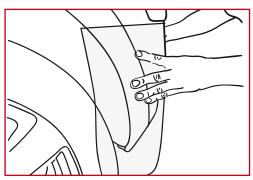
4. APPICATION OF THE FILM

The film is wet applied.

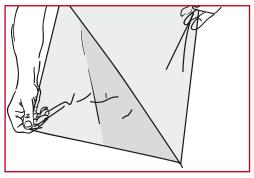
> Prepare the 11 litre vaporise with a mix A consisting of 4/5 of water and 1/5 of methylated spirit. The mix will accelerate the evaporation of the water. Prepare the 1 litre vaporise with a mix B consisting of 3/4 of water and 1/4 of HEXIS'O. The mix will accelerate the adhesion of the film.

The dosage of mix A and B may vary according to room temperature and the surface shape of the substrate to be protected.

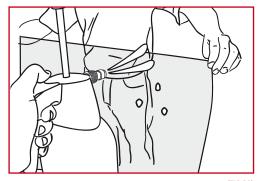
- Measure the areas to be covered. Cut the CARPROTECT leaving a margin of at least 10cm (4in) around the surface to be able to tension the film during application and to avoid fingerprints. (FIG 01)
- > Carefully remove the protective film from the surface of the CARPROTECT.
- > Carefully remove the liner from the CARPROTECT. (FIG 02)
- > Spray the mix A onto the vehicle body (front bumpers for example to start) and also on the adhesive face of the CARPROTECT. (FIG 03) This will make the positioning of the film on the vehicle easier.
- > Tension the CARPROTECT and position it on the area to be protected and wrap around its shape. (FIG 04)
- > To ensure that the squeegee glides easily spray some of mix A on the CARPROTECT film and then apply with the MARBLEU holding it at an angle of 45°. Press down hard to ensure good adhesion to the surface and to eliminate all of the water. (FIG 05)
- > Due to different paint qualities on the market it may be necessary to activate the adhesive - to spray the extreme concave and/or convex areas with the mix B. Leave for 5 minutes approx., then tension and apply the film immediately.
- Once the front bumpers are done, apply the film to the rear bumpers or the doors.



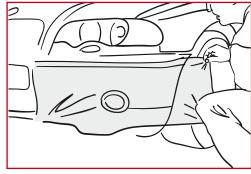
(FIG 01)



(FIG 02)



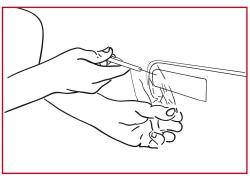
(FIG 03)



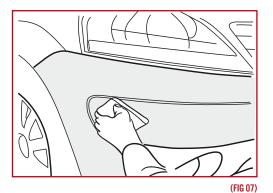
(FIG 04)



(FIG 05)



(FIG 06)



• Once the rear or the doors are covered in CARPROTECT, adjust the CARPROTECT by carefully cutting the contours for the the front bumpers using the CUTVITRE Olfa snap-off blade knife (exercising care not to damage the car paint). (FIG 06)

• Once the cuts for the front bumper are done, adjust the CARPROTECT by carefully cutting the contours on the rear and the doors using the CUTVITRE Olfa snap-off blade knife (exercising care not to damage the car paint).

Note: make sure that the adhesion of the film is sufficient so as to prevent the film from peeling off after cutting the contours..

> Once all the cuts are finished reapply the squeegee on all cut areas. (FIG 07)

5. CLEANING AND MAINTENANCE

The CARPROTECT film may be cleaned in conventional automatic car washes using cleaning products and detergents that are normally used for professional maintenance of vehicles and signage equipment.

Nevertheless exercise care: medium pressure at a distance of at least 50 cm and a water temperature of max. 35°C (95°F).

Attention: do not clean the film within 48 hours after application as this may affect the adhesion and result in the film peeling off.

Attention: solvents and corrosive detergents must not be used.

HEXIS advice: always carry out a test on a small surface before cleaning the entire vehicle.

6. REMOVING THE CARPROTECT

The CARPROTECT film carries a particular type of adhesive which facilitates the removal of the film.

> Carefully lift a corner using a blade taking care not to damage the substrate and progressively remove the film; the film should be held at an angle of 70° to 80° to the substrate.

A wider or narrower angle will make the breaking of the film more likely.

- > Always proceed gradually by carefully removing the film to reduce the risk of leaving adhesive residues on the substrate.
- > Continue carefully peeling the film until the complete area is removed always exercising care as to the peeling angle and pulling speed.
- > If any adhesive remains on the substrate, use a piece of cloth soaked in HEXIS'O and rub the surface until all traces have disappeared.

Attention: before handling any liquids, refer to the technical data sheets on our website www.hexisgroup.com.

For further information of a technical nature refer to the Technical Data Sheets available for download from our website www.hexsigroup.com under professional/data sheets..`

The great diversity of media and the ever growing number of possible applications commit the user to ensure that the product is suitable for each particular usage.

The information given does not constitute a warranty. The seller assumes no liability for claims or damages beyond the replacement value of a product. Specifications are subject to change without notice. Updates to specifications can be found on our website **www.hexisgroup.com.**



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