

PRODUCT BULLETIN

APPLICATION AND REMOVAL GUIDE

Protection film: BLACKLIGHT

REQUIRED EQUIPMENT

- › 1-litre PULVERISAT vaporiser
- › 11-litre PULVITRE vaporiser
- › Water + soft washing-up liquid
- › STEAMERSC1 STEAM CLEANER
- › HEXISGEL application liquid
- › MARJO squeegee
- › CUTOLFA30 30° blade cutter
- › LAMOLFA30 refill
- › "System 1-2-3" cleaning liquid:
 - › 1-Remover
 - › 2-Pre-Cleaner
 - › 3-Final Cleaner
- › ProTech® SHAMPCAR car shampoo
- › Microfibre cloth

STORE YOUR FILMS UNDER APPROPRIATE CONDITIONS

Keep the films away from any major source of heat (radiators and heaters, direct exposure to sunlight, etc.): the best temperature ranges from 15 °C to 25 °C (59 °F to 77 °F) with relative humidity of 50 %.

Store your films in their original packaging, in a dry environment. The rolls are wrapped in sealed polyethylene bags and are maintained in their cardboard packaging by plastic suspension caps to prevent the windings from being crushed by their own weight.

Always store the rolls in an upright position.

FEATURES

BLACKLIGHT is a grey-tinted, clear, self-adhesive film featuring an enhanced surface sliding, developed especially for the protection of vehicle head and rear lights or glazed surfaces. Thanks to its outstanding impact-proof properties, it protects your glazings against chipping caused by gravel, insects, car wash brushes, etc.

PREPARING YOUR APPLICATION SURFACE

Your BLACKLIGHT film can be applied to any clear surface or vehicle head and rear light as long as they are clean, smooth, non-porous and free from any traces of oil, grease, wax, silicone or other contaminants. To avoid unexpected outcomes, always assume that every substrate is dirty and needs to be cleaned.

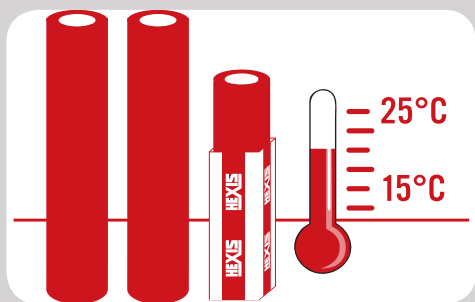
Do not forget to carry out a preliminary trial on a small surface to check if the substrate remains undamaged.

For further technical information, please refer to the technical data sheets available on our website www.hexis-graphics.com.

! *The Blacklight film is intended to be applied to exhibition vehicles or vehicles used on off-road terrains not suitable for public traffic (e.g. private lanes, circuits, etc.). HEXIS cannot be held responsible for any non-compliance with the use country's current legislation. It is advisable to enquire about the current legislation prior to any product implementation for applications other than those stated above.*

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Application methods are based upon HEXIS' experience and are non-restrictive. Comply with instructions to ease application of HEXIS films. HEXIS also offer training sessions for beginners and professionals to achieve optimum results.

1. RECOMMENDATIONS:

- › Optimal adherence of the BLACKLIGHT film is obtained after 24 hours following application.
- › After cutting the necessary film length for the application project, the remaining film must be stored on its original core (do not cut the rolls into several lengths, do not repack the product); the roll must be closed immediately and properly after use (tape or roll-collars), without exerting pressure on the film, in order to preserve all its qualities.
- › For application of Blacklight film to vehicle rear and back lights made of polycarbonate, apply it solely to non-flaky or non-opaque surfaces in a good shape.

2. PRELIMINARY TEST OF THE APPLICATION SURFACES:

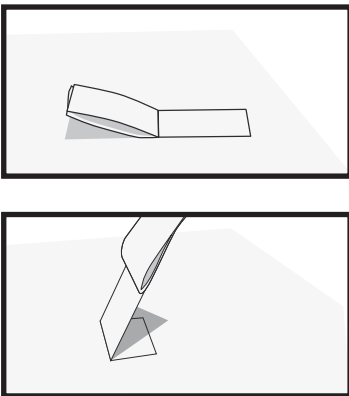
Before proceeding with any application, the installer must first inspect the substrate and the paint to which the film will be applied.

The installer and the client are responsible for the suitability assessment of the target surface to be covered.

2.1. Preliminary inspection of the substrate:

- › Any fresh new varnish must have dried for at least 7 days at 25 °C (77 °F) to outgas completely. An outgassing test must be carried out before applying the film.
- › Any old, powdery or flaky varnish must be sanded and renewed before application and must undergo a tear-off test.

2.2. Tear-off test:



Using a TESA® 7476 adhesive tape, or the like, apply to a surface of 2.5 cm x 5 cm (1 in. x 2 in.) plus some overhang material for easier removal. Fold and promptly tear off perpendicularly to the substrate surface. No traces should remain on the ripped off adhesive tape. Repeat this process in several places.

- > *On request, HEXIS can provide you with a Tesa® adhesive tape in 2.5 cm x 5 cm (1 in. x 2 in.) size.*

2.3. Outgassing test:

Use a square piece of around 15 cm x 15 cm (6 in. x 6 in.) of self-adhesive polyester or of the film to be applied. Wait for 24 hours or 2 hours at 65 °C (149 °F). The appearance of bubbles indicates that the substrate has insufficiently outgassed. Therefore, this process should be repeated after a couple of days.

- > *HEXIS are not liable for any bubbles caused by outgassing.*

3. CLEANING:

Cleaning of the substrate is required before performing the application. It should always be assumed that the substrate is contaminated with dirt. Some residues or contaminants may not be visible; however, they may impact the adherence of the film.

- ⚠ *Before using any cleaning liquids or chemicals, please refer to the technical data sheets and safety data sheets available for download on our website at www.hexis-graphics.com.*

3.1. Clean and soiled surface appearance:

For vehicle wraps, it is advised to wash the vehicle with the SHAMPCAR vehicle body shampoo, then use the PRE CLEANER (product no. 2).

- › Spray it on the surface.
- › Let it work for a few minutes, then wipe it dry with a clean cloth.
- › Carry out a final cleaning using the FINAL CLEANER (product no. 3).

3.2. Heavily soiled surface appearance:

For vehicle wraps, it is advised to wash the vehicle with the SHAMPCAR vehicle body shampoo, then use the ADHESIVE REMOVER (product no. 1).

Work in a ventilated area. Wear protective goggles.

Prior to treatment, run a compatibility test on a small, inconspicuous area of the substrate to be treated. Indeed, certain plastic materials might be damaged by the ADHESIVE REMOVER (product no. 1).

- › Spray onto the dirty surface and spread out using a dry cloth.
- › Then wait for a few minutes. Spray the ADHESIVE REMOVER (product no. 1) again, then wipe it dry with a clean cloth or squeegee.
- › When the substrate is clean and dry, clean again with the PRE CLEANER (product no. 2), then finish with the FINAL CLEANER (product no. 3) (as explained below).

4. APPLICATION OF THE BLACKLIGHT FILM:

The recommended minimum application temperature is +10 °C (+50 °F). Preferably, apply at a temperature ranging from +15 °C to +35 °C (from +59 °F to +95 °F).

BLACKLIGHT films must be applied according to the «wet» method, using either soapy water or our ready-to-use HEXISGEL product (for high-deformation surfaces).

- › For an application with soapy water, prepare the 1-litre PULVERISAT vaporiser using 4 ml (half a teaspoon) of a gentle detergent (Carshampoo), supplemented with water; this mixture allows to be easily removed.

- › Measure the parts to be covered. Cut the BLACKLIGHT film while leaving a margin of at least 10 cm (4 in.) around the surface to be covered in order to stretch it during application, and avoid any finger marks. (FIG. 01)

- › Carefully separate the liner from the BLACKLIGHT. (FIG. 02)



Shampcar
Concentrated vehicle
shampoo



Pre Cleaner
Powerful universal
cleaning agent



Adhesive Remover
Powerful cleaning
agent



Final Cleaner
Cleaning and
degreasing finishing
agent



Figure 01



Figure 02



Figure 03

- › Spray the surface to be protected as well as the adhesive-coated side of the BLACKLIGHT with the HEXISGEL or soapy liquid (PULVERISAT) (FIG. 03). This will enable a better positioning of the product on the vehicle.



Figure 04

- › Firmly stretch the BLACKLIGHT and position it (adhesive-coated side on the glass) in order to wrap the structure. (FIG. 04)

- › For an optimal wrapping of a convex surface, it may be necessary to soften the film using the STEAMERSC1 steam cleaner.



Figure 05

- › Apply the film using the MARJO squeegee, while holding the latter at 45°. Press firmly to make adhere the film to the surface and remove the application liquid. (FIG. 05)

To ensure that the squeegee glides easily, spray the HEXISGEL or soapy liquid (PULVERISAT) onto the BLACKLIGHT film.

- › After all removal of the BLACKLIGHT for adjusting or repositioning, spray the film and glazing before any reapplication.

- › Once the BLACKLIGHT film is applied, cut as indicated in the following paragraphs:

4.1. Straight cut without overlap:

This method is used for a cut along the glazing fully incorporated in the vehicle body.

- › Use a cutter with a new blade.
- › Trace with your finger the contours of the part.



Figure 06

- › For cutting, the cutter blade must be placed in a flat position, between the body and the glazing, placed against the glazing. Carry out the cutting operation by always maintaining this blade orientation. (FIG. 06)

- › Remove any excess film.

4.2. Cut with overlap:

To avoid scratching the paint, the cutter blade must always be parallel to the vehicle body.

- › Use a cutter with a new blade.

- › For carrying out the cutting, the cutter blade must be placed against the edge of the adjacent section. During cutting, make sure you always follow this edge by positioning the cutter towards the outside. (FIG. 07)

- › After cutting, some millimetres of the film overlap the covered surface.

- › Remove any excess film.

- › Apply the film by running the squeegee over the cut. (FIG. 08). Firmly apply over the edges, round parts and adjoining sides.

- › If a tunnelling effect appears during application, spray moisture on the film at this tunnelling area using the STEAMERSC1 in order to soften the film.

- › Firmly apply the film again at this tunnelling area using the squeegee covered with a microfibre cloth. (FIG. 09)

Using a microfibre cloth enables absorbing the application liquids and therefore accelerating the film's adhesive properties.

4.3. Finishing:

- › Cut the angles of the BLACKLIGHT film in rounded sections in order to ensure optimum adhesion of the cut film edges.(FIG. 10)

- › Finish off by firmly running the squeegee covered with a microfibre cloth over the whole film surface as well as cut edges in order to eliminate most application liquids.

⚠ *Small water bubbles or milky traces may appear right after film application. This phenomenon is quite normal. These traces will fade and disappear naturally after one week.*



Figure 07



Figure 08



Figure 09




Figure 10

5. CLEANING AND MAINTENANCE OF THE BLACKLIGHT FILM:


For optimum maintenance of your BLACKLIGHT film, HEXIS suggest to use the range of ProTech® cleaning agents specially designed for the total wrap.


The BLACKLIGHT film can be cleaned in any conventional automatic car wash, using cleaning products and detergents used for professional maintenance of vehicles and advertising equipment.

Nevertheless, for the use of high-pressure cleaners, respect the following procedure: apply medium water pressure at a minimum distance of 50 cm (20 in.) and a maximum water temperature of 35 °C (95 °F).

 *Caution: However, the film should not be cleaned within the first 48 hours following its application as this can affect the adhesive strength that may result in the film peeling off.*

 *Caution: Solvents and corrosive detergents must not be used.*

 *HEXIS are not liable for any adhesive films cleaned with the unspecified additives from cleaning stations.*

 *Car washes: The additive products and the condition of the rotating brushes may impair the adhesive strength of the films. It is commonly admitted that after 10 car washes, the polyurethane paint becomes streaked; therefore, and in the same way, we are not accountable for these mechanical effects that may affect the film appearance.*

HEXIS tip: Always carry out a test on a small area before cleaning the entire surface to be covered.

6. REMOVAL PROCEDURE:

The BLACKLIGHT film features a special adhesive designed to facilitate removal.


› Lift the corner gently with the cutter, without damaging the substrate, and gradually remove the film; the film should form an angle of 70° to 80° relative to the substrate surface.


 *An angle more or less wide or acute will cause the film to break more easily.*

› Always proceed gradually by heating small areas while carefully removing the film so as to limit the risk of leaving any adhesive on the substrate or tearing the film.

› Continue to peel off the film gently until it is completely removed while keeping a watchful eye on the heat applied, on the pulling angle of the film, and the pulling speed.

› If any adhesive remains on the substrate, take a cloth soaked with our ADHESIVE REMOVER (product no. 1) and rub the surface until all traces disappear.

 *Prior to treatment, run a compatibility test on a small, inconspicuous area of the substrate to be treated. Indeed, certain plastic materials might be damaged by the ADHESIVE REMOVER (product no. 1). HEXIS are not liable for damages and degradations caused to the substrate by using incompatible products.*

 *Before using any of our liquids, please refer to the technical data sheets available on our website at www.hexis-graphics.com.*

For further technical information, please refer to the Technical Data Sheets available for free download from our website www.hexis-graphics.com, on the "Professionals" pages.

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. All 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.

