



APPLICATION AND REMOVAL METHOD Film intended for tyres:

STICKNRIDE

REQUIRED EQUIPMENT

- > A printer
- A plotter
- «System 1, 2, 3» cleaning liquids:
 - > 2-Pre Cleaner
 - 3-Final Cleaner
- Microfibre cloths
- Tape (HEX100, HEX900, HEX901, HEX902, HEX904, HEX905 or HEX915)
- > ROLLRIV foam application wheel
- > Heat gun
- Laser thermometer

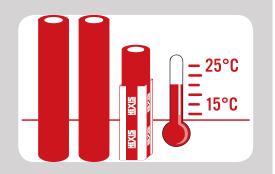
STORE YOUR FILMS UNDER APPROPRIATE CONDITIONS

Store in a dry place.

Keep the films away from light and heat.

Shelf life:

The shelf life of this film is 1 year when stored unopened in its original packaging at a temperature ranging from +15 $^{\circ}$ C to +25 $^{\circ}$ C (+59 $^{\circ}$ F to +77 $^{\circ}$ F) with relative humidity between 30 $^{\circ}$ 8 and 70 $^{\circ}$ 8.



FEATURES

STICKNRIDE is a printable adhesive-coated film, developed especially for temporary applications to sidewalls of rubber tyres. Due to its flexibility and strong adhesion of its adhesive, the film can be applied to tyre sidewalls: static tyres, bicycle tyres, or tyres of motorised vehicles (as long as the temperature of the rolling tyre remains below 50 °C (122 °F).

PREPARING YOUR APPLICATION SURFACE

The STICKNRIDE film is intended to be applied to the side face of rubber tyres, as long as their surface is clean and free from any traces of oil, grease, 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 that the substrate remains undamaged.

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

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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. RECOMMANDATIONS:

- > Optimal adherence of the STICKNRIDE film is obtained after 24 hours following application.
- > STICKNRIDE is intended for application to tyre sidewalls.
- > The tyre and film temperature ranges from 20 $^{\circ}$ C to 25 $^{\circ}$ C (68 $^{\circ}$ F to 77 $^{\circ}$ F) at the beginning of the film application.

CAUTION: The STICKNRIDE application operation is carried out at temperatures of \geq 80 °C (176 °F). Any heating operation may result in a tyre blow-out if it is over-inflated, damaged, obsolete, etc. A bursting tyre may cause serious injuries. It is therefore the responsibility of the installer to take all necessary precautions for his/her safety and the protection of his/her physical integrity. HEXIS are not liable for any injuries caused during handling, processing and application of the film.

- > STICKNRIDE adhesion is optimal to static tyres, bicycle tyres, tyres of motorised vehicles (as long as the temperature of the rolling tyre remains below 50 °C (122 °F).
- In order to optimise the film adhesion to tyres of motorised vehicles, it is important to keep an uncoated tyre area of at least 1 cm (0.39 in) between the rim and the film, as well as between the tyre tread and the film.

2. PRINTING TEST AND FILM CUTTING:

Prior to printing, prepare the cut-out.

The films should preferably be stored in the same environment as the printer-plotter.

The pressure of the blade has to be adjusted in accordance with the film.

If the pressure is too high, the protective liner may slightly crack causing adhesive bleeding. This would make the weeding process more difficult.

In most cases, it is recommended to weed the material right after cutting.

A minimum ink drying time of 24 hours must mandatorily be applied before carrying out any cutting if it must be done within the print.

Introduction to plotting:

The smallest possible height to be cut depends on the condition of the blade, the pressure, the cutting speed and the plotter. In general, an acceptable height is 10 mm (0.4 in), at medium speed and with a blade in good shape. Smaller letters can be obtained by reducing the cutting speed.

For instance, the recommended maximum speed for a ROLAND® SP300 cutting plotter is 30 cm/s (12 in/s). However, when the logos are fine or small, cutting at 20 cm/s (8 in/s) is recommended to obtain a better result.

<u>Note</u>: In any case, carefully read the operating manual of the cutting plotter and carry out a preliminary trial.

The blade must cut the film and the adhesive-coated surface. (Fig. 01)

A blunt and worn blade will impair the quality of the cut and will require a higher pressure. Weeding will also be more difficult.

Preliminary cutting tests:

In order to determine the plotter settings, we advise you to carry out a preliminary trial:

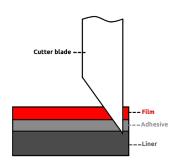


Figure 01

- Cut a square of 10 cm x 10 cm (4 in x 4 in).
- → Weed (Fig. 02) (Fig. 03): remove any excess material.
-) Check:
- > that the cut-out square adheres properly to the liner.
- > that the liner is free of any incisions.
- > Weeding will be successful if the plotter is properly set up (pressure, speed, shape of the blade).



Figure 02



Figure 03

3. PRINTING, CUTTING AND WEEDING:

Print the STICKNRIDE in positive mode.

Cut the film 24 hours after printing if it must be done within the graphics.



Refer to the operating manual of the printer-plotter.



Figure 04

Weed* immediately after cutting. (Fig. 04) (Fig. 05)

Carefully carry out this operation to leave the graphics on its liner.

* Weed = remove any excess material.



Figure 05

4. TAPE APPLICATION:

- ▶ Use the appropriate tape (HEX100, HEX900, HEX901, HEX902, HEX904, HEX905 or HEX915).
- In a dust-free environment, position and apply the tape to the printed, cut-out and weeded film.
- > Firmly push the tape with a squeegee, exerting pressure on the contours. (Fig. 06)

It is mandatory to avoid creating any bubbles or folds during this operation in order to obtain optimal final adhesion of the film to its substrate.



Figure 06

5. PRELIMINARY TESTS OF THE APPLICATION SURFACES:

Before proceeding with any application, the installer must first inspect the substrate to which the film will be applied (no cracking, bubbles, tearing, etc.).

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

6. CLEANING:

Cleaning of the substrate is required before performing any 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.

<u>^</u>

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.

Pre Cleaner Powerful universal cleaning agent.



Clean the part of the sidewall to which the film will be applied with the PRE CLEANER (product no. 2).

The next 3 steps should be done at least 2 times to ensure that the surface is compatible with a film application.

> Firmly rub with a stiff bristle brush, paying particular attention to the inside of the sidewall



Figure 07

> Spray the PRE CLEANER on the tyre sidewall (product no. 2). (Fig. 07)



Figure 08

→ Wipe it dry with a microfibre cloth. (Fig. 09)

structures. (Fig. 08)



Figure 09



Figure 10

• After the second cleaning, if too many black marks are left on the microfibre cloth, repeat the last three steps once again. (Fig. 10)

Final Cleaner Cleaning and

agent

degreasing finishing

- > Finally, spray the FINAL CLEANER (product no. 3) on the tyre sidewall.
- Wipe it dry with a clean microfibre cloth.
- During the last run, there must be hardly any rubber traces left on the microfibre cloth.

7. APPLICATION OF THE STICKNRIDE FILM:

The recommended minimum application temperature is $+10 \,^{\circ}$ C ($+50 \,^{\circ}$ F). Preferably, apply at a temperature ranging from $+15 \,^{\circ}$ C to $+35 \,^{\circ}$ C ($+59 \,^{\circ}$ F to $+95 \,^{\circ}$ F).

It must be applied according to the "dry" application method.

• Carefully separate the liner from the STICKNRIDE. (Fig. 11)



Figure 11



Figure 12

ightharpoonup Position the tape + STICKNRIDE compound at the desired location on the tyre. (Fig. 12)

Apply the tape + STICKNRIDE compound without exerting pressure using the ROLLRIV wheel. (Fig. 13)



Figure 13

This operation makes the tape + STICKNRIDE compound adhere to the substrate before proceeding with the definite film application.

→ Heat the tape + STICKNRIDE compound to a temperature of 80 °C (176 °F) using the PISTHERMIQ heat gun. (Fig. 14)



Figure 14



<u>Caution:</u> Overheating or prolonged heating of the tyre at high temperatures can damage its internal structure or make it burst causing serious injuries. Take the necessary precautions before carrying out any heating operation.



• Firmly slide the ROLLRIV wheel over the tape + STICKNRIDE compound in order to thoroughly make the film penetrate in the tyre structure. (Fig. 15)

Figure 15



> Carefully remove the tape by forming a 180-degree angle with the tyre. (Fig. 16)

Figure 16

If the STICKNRIDE film continues to stick to the tape, fold down the tape and repeat the heating and application steps described above. If necessary, heat up to 90 $^{\circ}$ C (194 $^{\circ}$ F).

In the case of additional graphics to be applied, repeat all the steps of paragraph 7, otherwise finish with the following steps.



> Slightly heat the STICKNRIDE film again (with a maximum of 80 °C (176 °F)). (Fig. 17)

Figure 17



structures of the tyre sidewall. (Fig. 18)

Figure 18

• Wait until the tyre cools down completely before driving.

8. CLEANING AND MAINTENANCE OF THE STICKNRIDE FILM:

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

> Slide the ROLLRIV wheel by pressing firmly in order to make the STICKNRIDE adhere to the

However, HEXIS strongly discourage from using high-pressure cleaners. The latter may result in a beginning film peeling off (more specifically in the area of tyre sidewall structures) which could cause a general media lifting from the substrate during driving.



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.

9. REMOVAL PROCEDURE:

The film being flexible, elastic and coated with a permanent reinforced adhesive, its removal may be difficult.

• Gently lift the corner of the film with a round-end and non-sharp object, such as FLATTWEEZ, until you can grab it with your fingers. Continue to peel off the film; it should form an angle of 70° to 80° with the substrate surface.



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

- If the adhesion is too strong, using the heat gun, start from a corner and heat the film to a temperature of around 50 °C (122 °F).
- 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 off the film.
- Continue to peel off the film gently until it is completely removed while keeping a watchful eye on the heat applied, the pulling angle of the film, and the pulling speed.
- If any pieces of film remain stuck to the tyre structures, you can use the WEEDER3 to catch them for removal.
- If any adhesive remains on the substrate, take a cloth soaked with our PRE CLEANER (product no. 2) and rub the surface until all traces disappear.

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.



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