GRAFIWRAP PAINT PROTECTION FILMS TPU

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Description

The Grafiwrap TPU paint protection films are soft transparent thermoplastic polyurethane films, provided with a pressure-sensitive permanent acrylic adhesive. The glossy films come with an additional transparent film on top of it, which should be removed before or after applying the paint protection film. The adhesive layer is protected by a high-quality silicone paper. The paint protection films have been developed especially for protecting vehicles against stone chips and scratches.

Characteristics

- Finish: glossy or matt, transparent or black the glossy films are provided with a transparent protective film to prevent this film from getting scratched during its application.
- Good resistance against weather influences, which results in an outdoor life expectancy up to 8 years (Central-European climate and for vertical applications).
- Simple cleaning.
- Good chemical resistance.

Application

Grafiwrap paint protection films have been developed especially for protecting your vehicle against stone chips and scratches.

→ Other applications in close consultation with Grafityp!

Limitations

Limitations are mentioned for each product group separately in the respective technical data sheets, of which you can find the most recent version on the Grafityp website (www.grafityp.com).

Warranty

Please consult the General Warranty Certificate for detailed warranty declarations of the Grafiwrap paint protection films. The most recent version of this warranty certificate will be available on the Grafityp website (www.grafityp.com).

Mounting Instructions

Grafityp provide trainings, enabling the customer to mount the Grafiwrap paint protection films in a professional and skilled way. A detailed manual on the application of Grafiwrap paint protection films can be found on the Grafityp website (www.grafityp.com).

Before mounting

A brief preceding study will save you a lot of time and will guarantee a better end result. Always check the following points:

- What kind of surface do the films need to be applied to, and is this surface suited for self adhesive films?
- The polyurethane films are extremely suited for protecting your vehicle against stone chips, scratches,...

Grafiwrap TPU paint protection films are very deformable.

They are also suited for protecting car head lights.

Make sure all necessary equipment and materials are ready at hand before starting the job.

Pay attention to your own safety and health. Take into account all safety prescriptions of the suppliers when using electric equipment and products that are necessary to complete the job successfully.

The preparation

Tip: check whether certain materials are suited for wrapping. This can be done very easily. Clean the surface thoroughly and do the drop test. If you pour water on the surface, it shouldn't form drops. If drops appear on the surface, the material in not suited for wrapping with any material. A structured surface also means a reduced adhesion, which is not to be advised.

Cleaning:

- Vehicles need to be washed thoroughly at least one day before wrapping them.
- Use a simple detergent to wash the vehicle and rinse it abundantly, or go to the car wash (without wax treatment). Make sure that no dust, sand or mud stay behind in small cracks or indents. Use compressed air to dry all cracks and protection strips of the vehicle.
- After washing the vehicle, allow it to acclimatize for a night in the workshop.
- Make sure all wax and polishing products have been removed completely. In most cases they have not been removed completely from new vehicles. They have to be removed by means of industrial cleaning products or a slicone remover (isopropanol is not sufficient in this case).
- Avoid damage to rubber and plastic car parts when using some corrosive products.
- When everything is completely clean, the complete surface needs to be cleaned once again with isopropanol. Isopropanol removes all detergents that stayed behind on the surface.
- Other objects to be wrapped always need to be cleaned and degreased thoroughly before you start wrapping them.
- If you need to apply the film on sawn panels, it is of utmost importance that the sawn edges of these panels are cleaned thoroughly. Use compressed air to do so. After all, a lot of dust creeps iinto these edges, which is electrostatically attracted by the vinyl and thus gets in between the vinyl and the panel.

The application

Tip: make sure the workshop is dust-free, that the necessary ambient temperature has been reached, and that the job can not be complicated by direct sunlight or by a heat source. Also make sure the floor is completely clean, as the vinyl gets statically loaded during the application process, thus attracting dust very easily.

Tip: wash your hands thoroughly before using this film. Please remember that it is transparent, so a dirty fingerprint will always remain visible.

The vinyls are always applied wet.

- Run a couple of tests first. They can save you a lot of work. Apply a test strip on the paintwork, the shop window or the panel and check whether it sticks sufficiently.
- This film can be used perfectly for 2D or 3D deformations.
- Even though polyurethane films can be stretched up to 300%, the film should not be stretched by more than 10% for an application without any problems.

The tools:

- Soft squeegee / rubber squeegee
- Slip solution and tack solution
- Cutting knives
- Heat gun
- Extension cord
- Sufficient light
- Roll of tape
- Electric current
- Meter, felt-tip, pencil,...

The preparation:

- Place the vinyl (with its backing paper) on the vehicle. Use paper tape or magnetic holders to do so.
- Always avoid cutting in the paintwork. This can cause scratches and later on even rust marks.
- Apply some reference points where vinyl and car body meet, so you can easily place the vinyl at its exact position again.

The application of the vinyl:

A detailed manual for applying paint protection films can be found on <u>www.grafityp.com</u> (Download – Manuals).

After the job has been completed

Leave the car or the panels in the workshop for a night, soit can get used to its new coating. Allow it to cool down slowly in the acclimatized area.

Cleaning and maintenance

- The car can be washed in a car wash without any problems after about three days. However, the brushes can make scratch marks in the vinyl.
- We advise you not to clean the vehicle with a high-pressure cleaner.
- Polyurethane is a soft material. Therefore the cleaning and maintenance shall only be executed with non-scouring cleaning agents, without strong solvents or corrosive ingredients.
- Dirt that is hard to remove, such as insects, resin, etc... needs to be removed immediately with warm water and a soapy solution.

Removal

The Grafiwrap paint protection films have been developed especially not to leave behind any glue residues when removing them. If you wish to remove the vinyl, we advise you to heat it with a heat gun. Pull off the film under an angle of $+90^{\circ}$. If any glue stays behind on the surface, you can remove it with isopropanol.

Tip: if any glue residues stay behind, it is often because the vinyl is too warm and the adhesive is too cold. Just wait for a moment until the heat has reached the area between the adhesive layer and the paintwork (50-60°C), and things will become a lot easier. You will find the right balance between heating and removing the vinyl after some practice.

Product range

Het range of TPU Grafiwrap paint protection films consists of the following references:

Reference	Description	Self healing	Extra protective film	Thickness film (DIN 53370) *
GG10	Transparent glossy		©	100 μm
GG15	Transparent glossy		☺	150 μm
GG20	Transparent glossy		©	200 μm
GGSHG15	Transparent glossy	☺	☺	150 μm
GGSHM15	Transparent matt	☺		150 μm
GGSHBG15	Black high gloss	☺	©	150 μm

^{*} The thickness of the Grafiwrap paint protection films may vary slightly. The values mentioned are average values, obtained from a series of measurements.

Product Characteristics

A detailed overview of the product characteristics can be found on the respective technical data sheets, of which you can always find the most recent version on the Grafityp website (www.grafityp.com).

Storage Instructions

All Grafiwrap paint protection films always need to be stored in their original packing and with the original protection flanges (and preferably stored vertically).

In order to avoid any loss of quality, the Grafiwrap paint protection films should also be stored in suitable conditions, that is at a temperature between 10 and 20°C and a relative humidity of 50 %.

Under these conditions the Grafiwrap paint protection films can be stored up to two years.

Important

The information mentioned in this product bulletin is based upon tests that were executed by Grafityp and that we consider to be reliable. The information always represents an average, a minimum or a maximum value, and should be considered as such. It is only given for your information, and does not give any guarantee. Grafityp cannot be held responsible for any damage, either direct or indirect, resulting from the use of the film. It is up to the user to decide whether or not the product is suited for his particular application.

Technical Service

If you have any technical questions with regard to the Grafiwrap paint protection films you can always contact our technical department :

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