PRODUCT-BULLETIN

GRAFIPRINT PRINT MEDIA CAST

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Description

Grafiprint cast print media are soft, polymeric cast PVC films, especially developed to be used on solvent printers (eco/mild/hard), latex printers and UV printers. The films are provided with a pressure-sensitive acrylic adhesive. This adhesive is protected by a high-quality silicone paper.

Characteristics

- Finish: white glossy and transparent glossy.
- These products have an outdoor life expectancy up to 10 years (see product data sheet), for vertical applications and under Central-European conditions (except for the transparent films).

Application

Grafiprint cast digital print media have been developed especially for all sorts of long-term outdoor applications under the most extreme conditions, on uneven surfaces and over rivets.

→ 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 Grafiprint Warranty Certificate for detailed warranty declarations of the Grafiprint print media. The most recent version of this warranty certificate will be available on the Grafityp website (www.grafityp.com).

Mounting Instructions

Grafityp provide trainings in various levels, enabling the customer to mount these films in a professional and skilled way. A detailed manual on the application of Grafiprint 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 :

- How old is the car and in what condition is the car paint?
- Do you see any signs of repais ? Repainted car parts are often not of the same quality as original parts. That can cause problems when removing the film afterwards.
- Do you see any rust marks?
- Does the object contain any plastic parts that need to we wrapped?
- Do you have to wrap over rivets or other uneven surfaces?
- Do you have to cover any silicone seams?
- How big is the object?
- Does it contain any problem zones ?
- AE38P, AE38C and GT38SL have the advantage that no air bubbles are trapped. The glue structure
 ensures that. Keep in mind that this is not the best solution for wrapping extreme deformations. Use S30P,
 S34P, S38P or S39P in that case. If you nevertheless want to work with AE38 in deep indents, it is best to
 laminate the material with LAMx30.

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.

Make sure you comply with the legislation in your country. E.g., if you wish to cover the rear window, the vehicle must have two wing mirrors in most countries. Also the permitted height of a sun strip may be different in every country.

Grafiprint print media Monomeric (M-Series)	Recommended Grafiprint laminates	Even	Slightly undulating	Rivets	Strongly undulating	Deep indents	Vehicles, wrapping	Short-term	Middle-term	Long-term
S30P	LAMx30 – LAMx40 LAMx45 – LAMSTD	☺	☺	©	☺	©	☺	©	☺	©
S34P – S38P	LAMx30 – LAMx40 LAMx45 – LAMSTD	©	©	©	©	0	©	(()	©	☺
S39P	LAMx30 – LAMx40 LAMx45 – LAMSTD	©	©	(i)	©	©	(()	©	☺
AE38P – AE38C	LAMx30 – LAMx40 LAMx45 – LAMSTD	©	:	(1)	③		(1)	()	(i)	©
GT38SL	LAMx30 – LAMx40 LAMx45 – LAMSTD	©	:	(1)	③		(1)	()	(i)	©

The preparation

Tip: preferably use the combinations of Grafiprint print media + laminates, recommended by Grafityp. Don't combine cast films with e.g. calendered or non-pvc films, one kind on top of the other. They have different characteristics, which may have a negative effect on the end result.

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.
- Remove protection strips, number plates, antennas, mirrors windscreen washers.
- 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.

Tip: ask your customer whether you can remove the small 3D texts from the vehicle. These small texts, like e.g. 4x4, Turbo, 2.0D, etc. can be removed easily by heating them. If this is done with care, you can put them back afterwards by means of glue strips.

You will save a lot of time when finally wrapping the vehicle, and in most cases i twill allow you to create a much nicer design. Also remove the rubber sealings of the car, wherever possible. We advise you to apply the vinyl also under the rubbers, to get a nice optical finishing touch.

Laminating

There are various ways to laminate the print media:

- Cold lamination : can be used for most applications
- Warm lamination: is always better and is advised for wrapping. Warm lamination is done by heating your laminated print at the bottom side (= by heating the backing paper instead of the laminate).

Follow the instructions in the manual and pay attention to the safety instructions that come with your laminator.

Allow your print to dry for at least 24 to 48 hours (or even longer, depending on the amount of ink) before laminating it, and wait for another 24 hours before applying the film.

Tip: Remove any excess laminate around the edges immediately after laminating. Nothing is more annoying than pieces of laminate that stick to your print when it is unrolled.

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.

The vinyls are always applied dry.

Run a couple of tests first. They can save you a lot of work. Apply a test strip on the paintwork and on a side window, and compare the results.

The tools:

- Felt squeegee
- Cutting knife
- Soft, clean and fluff-free gloves (glove1)
- 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:

- Remove the backing paper from the film.
- Position the film without folds against the reference points you applied earlier.
- Use a heat gun to make the film more flexible.
- Rub the vinyl smoothly by means of the squeegee. Make sure that the air between the object and the vinyl can always escape.
- Wait to cut off excessive film until it has completely cooled.
- A detailed manual for wrapping can be found on www.grafityp.com (Download Manuals).

Tip: never lay a felt squeegee on the floor. Sand will creep into the squeegee, and you will make scratches on the vinyl the next time you use it.

The finishing

Very often, the customer comes back to pick up his "unmissable" vehicle as soon as possible. Nevertheless, it is of utmost importance that the vehicle is "heated once again".

- All edges and deep indents need to be heated once again in order to remove all surface tension. If you fail to do so, the vinyl will try to return to its original form and it is possible that it will come loose in certain areas. The reheating process is done with a temperature of 350°C on the heat gun's display (= 90°C on the car's paintwork). Make sure you keep moving the heat gun in such a way that the vinyl does not get burned.
- With GT38SL it is important that the film is heated well EVERYWHERE once again after the application. This film has a very low initial tack, which builds up to a high end tack only after it is heated.
- Small air bubbles will disappear automatically after a certain period of time. Larger air bubbles on even surfaces need to be puntured to allow the air to escape.

After the job has been completed

Leave the car in the workshop for a night, soi t 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.
- Vinyl is a soft material. Therefore the cleaning and maintenance shall only be executed with non-scouring cleaning agents, without strong solvents or corrosive ingredients. If you want to give the vehicle some additional gloss after a certain period of time, you can "polish" it. Please only use the products that are specifically meant for this application. The old application "wax on wax off" with a polishing paste is not applicable in this case.
- 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 Grafiprint print media 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, and things will become a lot easier. You will find the right balance between heating and removing the vinyl after some practice.

Product range

Grafiprint polymeric print media are available in the following versions:

Reference	Description	Adhesive	Air Escape Adhesive technology	Thickness film (DIN 53370) *
S30P	Transparent glossy	Permanent		50 μm
S34P	White glossy	Grey permanent		50 μm
S38P	White glossy – indents	Grey permanent		50 μm
S39P	White high gloss	Grey permanent		50 μm
AE38P	White glossy	Grey permanent	©	50 μm
AE38C	White glossy - comfort	Grey permanent	©	50 μm
GT38SL	White glossy – slide & wrap	Grey permanent	©	50 μm

^{*} The thickness of the Grafiprint print media 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 Grafiprint materials 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 Grafiprint materials 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 Grafiprint materials 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 Grafiprint films you can always contact our technical department :

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