PRODUCT-BULLETIN

GRAFIPRINT PRINT MEDIA PVC-FREE

Released on 1st May 2021



Description

Grafiprint pvc-free print media are soft, environment-friendly Grafityp Ecology Films (GEF), free of chloriine and plasticizers, whether or not provided with a special printable coating. The films have been developed to be used on eco-solvent printers, latex printers and UV printers. The films are provided with a water-based pressure-sensitive acrylic adhesive. This adhesive is protected by a high-quality silicone paper.

Characteristics

- Finish: white matt.
- Most of these products have an outdoor life expectancy up to 5 years (GEF LX and GEF UV) or 2 years (GEF ES) (see product data sheet), for vertical applications and under Central-European conditions.

Application

Grafiprint pvc-free digital print media have been developed especially for all sorts of indoor applications and short-to middle-term outdoor applications on an even surface.

→ 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:

- What kind of surface do you want to apply the film onto, and is it suited for sign making?
- This film is ideal for all indoor and outdoor sign making on an even, smooth surface.
- Check in the table on the next page which material is best suited for your particular job.

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. For some advertisement panels you may need a building permit.

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
GEF ES	LAM121 - LAM130 - LAM171	☺	☺					☺	☺	
GEF LX	LAM121 - LAM130 - LAM171	☺	☺					©	©	
GEF UV	LAM121UV - LAM130UV LAM171UV	☺	©					©	0	

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:

- The surface needs to be cleaned thoroughly.
- Watch out for damage, caused by 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.

Tip: Keep your material, with the application film on top of it, flat and on top of each other, making sure it is deformed as little as possible. If you need to enroll the material, make sure it is enrolled with the application film at the outside.

Laminatina

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.

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 and check whether it sticks well enough.

The tools:

- Squeegees
- Cutting knife
- Sufficient light
- Roll of tape
- Electric current
- Meter, felt-tip, pencil,...

The preparation:

- Place the vinyl (with its backing paper) on the surface. Use paper tape or a pencil crayon to do so.
- Always avoid cutting in the panel or on glass. This can cause scratches.
- Apply some reference points where vinyl and panel 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.
- Rub the vinyl smoothly by means of the squeegee. Make sure that the air between the object and the vinyl can always escape.
- A detailed manual for the application of films, provided with an application films, can be found on www.grafityp.com (Download Manuals).

The finishing

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.

Cleaning and maintenance

- We advise you not to clean the film with a high-pressure cleaner.
- Advertisement panels at the side of the road are exposed to water and dust day after day. 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.

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 pvc-free print media are available in the following versions:

Reference	Description	Adhesive	Print technology	Thickness film (DIN 53370) *
GEF ES	White matt	Semi-permanent	Eco-solvent	150 μm
GEF LX	White matt	Semi-permanent	Latex	100 μm
GEF UV	White matt	Semi-permanent	UV-Curable	100 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 :

Mr. Richard van Ochten Centrum-Zuid 1539 3530 Houthalen (Belgium) Tel.: +32-(0)11-600850

e-mail : <u>tech.sup@grafityp.com</u> website : <u>www.grafityp.com</u>