

# GRAFICAST WRAPPING FILMS

## MATT COLOURS



### References MSC901 to MSC960

Released on the 7<sup>th</sup> of January 2014

#### PROVISIONAL SPECIFICATIONS



#### Description

The matt Graficast wrapping films are soft cadmium-free cast PVC films, provided with a pressure-sensitive permanent acrylic adhesive. This adhesive is protected by a high-quality silicone paper.

#### Composition

- Film : 100 micron thick matt cast PVC film  
 Adhesive : permanent pressure-sensitive solvent-based acrylic adhesive, with a high resistance against UV-radiation, chemical products and humidity (grey adhesive for MSC901, MSC920 and MSC930 – transparent adhesive for all other references).  
 Backing paper : siliconised white PE-coated paper of 130 gr/m<sup>2</sup>

#### Application

The matt Graficast wrapping films were developed for long term outdoor applications under the most extreme conditions. As the film is extremely soft and flexible, it can be used over corrugations or rivets with ease. Graficast films are therefore suitable for sign making and wrapping on cars, boats, trucks and aeroplanes, but also for stripings in the auto-motive industry.

#### Product advantages

- Extremely flexible – suited for all difficult applications, such as car wrapping
- Extremely decorative – suited for all creative designs

#### Product specifications

Technical properties at a relative humidity of 50 ± 5 % and a temperature of 23 ± 2°C.

		Test method	Result
1.	<b>Thickness<sup>1</sup></b>		
	Thickness vinyl	Din53370	100 micron
	Thickness vinyl + glue + backing paper	Din53370	285 micron
2.	<b>Elongation at break<sup>2</sup></b>		
	In production-length direction	Din53455	> 150 %
	In cross direction	Din53455	> 150 %
3.	<b>Dimensional stability<sup>3</sup></b>	Finat 14	< 0.20 mm
4.	<b>Degree of gloss</b>		
	Maximum (measuring angle 85°)	Din67530	< 10 GU (gloss units)
5.	<b>Adhesion strength<sup>4</sup></b>		
	After 20 minutes	Finat 1	15 N/25mm
	After 24 hours	Finat 1	18 N/25mm
6.	<b>Quickstick<sup>5</sup></b>	Finat 9	10 N
7.	<b>Expected outdoor life span<sup>6</sup></b>	-	Flat and slightly curved applications: Adhesion: 10 years Colour : 7-10 years Full wrap : 3 - 5 years
8.	<b>Temperature range</b>		
	At application	-	+5°C to +40°C
	At use	-	-45°C to +115°C
9.	<b>Colour back print</b>	-	brown
10.	<b>Flammability</b>		
	If applied on aluminium, glass, steel = self-extinguishing		

## Storage instructions

All Graficast materials always need to be stored in their original packing and with the original protection flanges. Especially for cast films it is important that they are stored vertically. These films are softer than calendered films and consequently more sensitive to pressure marks when they are stored horizontally, resting on their own weight. In order to avoid any loss of quality, the Graficast 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 Graficast materials can be stored up to two years.

## Remarks

- In order to achieve an optimal result, we advise you to clean the surface with isopropanol and/or to use a low-tack application tape !
- The colour of the Graficast vinyls may come off slightly because of over-pigmentation, but as the film is coloured in the mass, this will have no influence on the UV-resistance and the eventual colour of the vinyl.
- As the colour of the film can differ slightly for each production run, we advise you not to use films with different batch numbers in one single and critical job. The number to be taken into consideration for this purpose consists of the first 5 numbers of the 7-digit batch number.
- When applying matt films, you can easily get scratches on the material. That is why we advise you always to apply matt films using a felt squeegee and wearing gloves. If you still see scratches on the material after the application, these can be removed again with ease by means of a hot air gun.
- The matt Graficast films MSC901, MSC920 and MSC930 are not suited for printing.
- If you want to create matt printed graphics, we advise you to print on Grafiprint S34P (glossy print film, 50 micron) and to laminate the print with Grafiprint LAM045 (matt laminate, 40 micron).
- In order to remove the film again, it should be heated thoroughly in order to prevent adhesive transfer.

## Important

The information, mentioned in this product data sheet, 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. It is up to the end user to decide whether or not the product is suited for his particular application.

- 1)**  
The thickness of the Graficast materials may vary slightly. The indicated value is an average value, obtained from a series of measurements.
- 2)**  
The elongation at break of the Graficast materials may vary slightly. The indicated value is a minimum value, obtained from a series of measurements.
- 3)**  
The dimensional stability is the shrinkage of the unprinted material in mm. This value is measured by applying the film on aluminium (10x10cm), and placing it in a hot-air oven at 70°C for 48 hours (= Finat 14 Method, adjusted according to our own internally developed procedure). The indicated value is a maximum value, obtained from a series of measurements.
- 4)**  
The adhesion strength is measured on glass, and this after 20 minutes and after 24 hours. The film is removed again in an angle of 180° and at a speed of 300 mm/min. The indicated value is an average value, obtained from a series of measurements.
- 5)**  
The "Quickstick" is the direct adhesion strength, measured on glass. The indicated value is an average value, obtained from a series of measurements.
- 6)**  
The expected outdoor life span refers to outdoor use under Central European conditions and to vertical applications. Non-vertical application can reduce the life span up to 50%. The expected life span of our films is based upon professional application on a dry, degreased and suitable background. Tropical conditions, or the use near chemical emission, may have a detrimental effect on the life span. The life span can also differ, depending on the colour (due to the pigmentation).  
For more detailed information we also refer to our general "Grafiprint Warranty Certificate" and to our "General Terms and Conditions of Sale and Delivery".