

PRODUCT DATA SHEET



GRAFIPRINT MEDIA FOR SOLVENT PRINTERS

REFERENCE S39P

Released on the 14th December 2015

PROVISIONAL SPECIFICATIONS



Description

Grafiprint S39P is a soft and seamless, cadmium free, white high gloss polymeric cast PVC film, especially manufactured for use on solvent printers (eco/mild/hard) and UV printers. The film is provided with a permanent pressure-sensitive **grey** solvent-based acrylic adhesive. Thanks to this grey adhesive, the film is much less transparent. The adhesive is protected by a high quality "ultra smooth" silicone paper.

Composition

Film : ± 50 micron thick polymeric cast white high gloss PVC film.
 Adhesive : permanent pressure-sensitive grey solvent-based acrylic adhesive with a high resistance against UV-radiation, chemical products and humidity.
 Backing paper : white ultra smooth PE-coated paper of 190 gr/m²

Application

Grafiprint S39P PVC film is perfectly suited for all long-term outdoor applications under the most extreme conditions, on corrugated surfaces and over rivets.

The film is meant for applications for which the smoothness of the film surface should be an added value.

If you wish to protect the surface of the S39P, we advise you to laminate it with the smooth Grafiprint LAMX30 laminate.

Product Characteristics

- Extremely good gloss
- Clean removal
- Slightly increased flexibility over standard cast print films

Product Specifications

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

		Test method	Result
1.	Thickness¹		
	Thickness vinyl	Din53370	50 micron
	Thickness vinyl + glue + paper	Din53370	280 micron
2.	Elongation at break²		
	In production length direction	Din53455	> 190 %
	In cross direction	Din53455	> 190 %
3.	Dimensional stability³	Finat 14	< 0.25 mm
4.	Degree of gloss		
	Minimum (measuring angle 20°)	ISO 2813	> 50 GU (gloss units)
5.	Adhesion strength⁴		
	After 20 minutes	Finat 1	12 N/25mm
	After 24 hours	Finat 1	14 N/25mm
6.	Quickstick⁵	Finat 9	10 N
7.	Expected Outdoor life span⁶	-	10 years
8.	Temperature range		
	At application	-	+5°C to +40°C
	At use	-	-25°C to +100°C
9.	Colour back print	-	Grey
10.	Flammability		
	If applied on aluminium, glass, steel = self-extinguishing		

Storage instructions

All Grafiprint 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, so are 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 Grafiprint solvent vinyl should also be stored in suitable conditions at a temperature between 10°C and 20°C, and a relative humidity of 50 %. Under these conditions, the Grafiprint materials can be stored for a period of two years.

Remarks

- The Grafiprint cast vinyls are manufactured by a patented production method.
- Large amounts of solvent ink on the material could activate the ink on the backing paper of the material. If this is then rewound too quickly after printing, the print on the reverse of the material may become visible on your print. Therefore we advise you to limit the amount of ink and to leave the prints to dry sufficiently before re-winding them.
- In order to remove the film it should be heated thoroughly in order to prevent adhesive transfer.
- 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.

Recommended temperature settings

When printing on Grafiprint solvent and low-volatile solvent media, the temperature settings of the printer are extremely important. Depending on the ambient conditions, the amount of ink and the requested print quality, we advise a pre-heater temperature between 35°C and 45°C. This temperature can be raised, but please ensure that the Grafiprint material stays completely flat. Too high a temperature can lead to an inferior print quality and to colour differences, this is because the material will become soft and could undulate, a result of this is that your print could get damaged by the transport wheels of the printer, or it could cause a print head strike.

The same goes for the use of an after-heater (dryer). We advise an after-heater temperature that is about 5°C to 10°C higher than the pre-heater temperature. But again, the material should not undulate as a result of a too high temperature setting.

In general, we can say the temperature of both heaters should be set as high as possible, without the material showing any form of undulation.

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 Grafiprint materials may vary slightly. The indicated value is an average value, obtained from a series of measurements.
- 2)** The elongation at break of the Grafiprint 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.

As the quality of your print does not only depend on the Grafiprint medium, but also on so many other factors (such as the printer, the quality of the inks, the print software, the ICC profile, the ambient temperature, the air humidity, etc...), Grafityp cannot guarantee or be held responsible for the eventual print result.

The materials mentioned in our compatibility list have been tested under normal conditions and are purely indicative.

Subject to modifications.

For more detailed information we also refer to our general "Grafiprint Warranty Certificate" and to our "General Terms and Conditions of Sale and Delivery".