PRODUCT DATA SHEET

GRAFIPRINT MEDIA FOR LARGE FORMAT PRINTING

REFERENCE Mx112P (air escape)

Released on 6th June 2017
PROVISIONAL SPECIFICATIONS

Description

Grafiprint Mx112P is a soft, seamless, cadmiumfree, monomeric calendered, white glossy PVC film, specially for use on solvent printers (eco/mild/hard), latex printers and UV printers. The film is provided with a permanent pressure-sensitive dispersion-based acrylic adhesive. This adhesive is protected by a high quality structured silicone paper, which gives the product an AIR ESCAPE effect.

Composition

Film :	100 µm thick monomeric calendered white glossy PVC film with AIR ESCAPE technology
Adhesive :	transparent permanent pressure-sensitive dispersion-based acrylic adhesive with a high resistance against UV-radiation, chemical products and humidity.
Backing paper :	white clay-coated embossed paper of 135 gr/m²

Application

Grafiprint Mx112P PVC film is perfectly suited for all possible indoor applications and short-term outdoor applications on non-corrugated surfaces. The air escape technology guarantees an easy and bubble-free application, on condition that the material is applied dry.

Product Specifications

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

		Test method	Result
1.	**Thickness[1]**		
	Thickness vinyl	Din53370	100 µm
	Thickness vinyl + glue + paper	Din53370	255 µm
2.	**Elongation at break[2]**		
	In production length direction	Din53455	> 200 %
	In cross direction	Din53455	> 200 %
3.	**Dimensional stability[3]**	Finat 14	< 1,00 mm
4.	**Gloss**		
	Minimum degree of gloss (measuring angle 20°)	Din67530	> 50 GU (gloss units)
5.	**Adhesion strength[4]**		
	After 20 minutes	Finat 1	12 N/25mm
	After 24 hours	Finat 1	16 N/25mm
6.	**Quickstick[5]**	Finat 9	10 N
7.	**Expected Outdoor life span[6]**	-	up to 3 years
8.	**Temperature range**		
	At application	-	+10°C to +35°C
	At use	-	-15°C to +60°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 (and preferably stored vertically).
In order to avoid any loss of quality, the Grafiprint Solvent Vinyl 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 for a period of two years.

Remarks

Large amounts of solvent ink on the material can activate the ink on the backside of the material. If the material is enrolled too quickly after printing, the print on the backside of the material may become visible in your printout. Therefore we advise you to limit the amount of ink and to leave the prints to dry sufficiently before enrolling them.
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 in to consideration for this purpose consists of the first 5 numbers of the 7-digit batch number.

Recommended temperature settings

When printing on the 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, on condition that the Grafiprint material stays completely flat. A too high temperature can lead to an inferior print quality and to colour differences, because the material will become soft, as a result of which it might get damaged by the transport wheels of the printer, and because the material will undulate, as a result of which it could touch the print head.
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 can not 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".