PRODUCT DATA SHEET

GRAFITACK CARBON SERIES

REFERENCES PC01, PC55 and PC80

Released on 16th April 2012
PROVISIONAL SPECIFICATIONS

Description

The Grafitack Carbon series (references PC01-Carbon White, PC55-Carbon Silver and PC80-Carbon Black) is a soft structured cadmium-free polymeric calendered PVC film with a carbon effect. The film is provided with a pressure-sensitive permanent acrylic adhesive. This adhesive is protected by a high-quality silicone paper.

Composition

Film : structured polymeric calendered PVC film with a carbon effect, with a thickness of 150 microns
Adhesive : transparent permanent pressure-sensitive solvent-based acrylic adhesive, with a high resistance against UV-radiation, chemical products and humidity.
Backing paper : siliconised white PE-coated paper of 130 gr/m²

Application

Grafitack carbon films can be used for indoor and outdoor applications. Grafitack calendered carbon films have been developed especially for in- and outdoor decoration and for wrapping flat and/or sligtly curved surfaces. When applying the structured films, it is important that the right techniques are used for heating the material. More "tips & tricks" on the application of the structured Grafitack/Graficast films can be found on our website (www.grafityp.com).

Product advantages

The Grafitack carbon films give your design a perfect carbon look.

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 Thickness vinyl + glue + backing paper	 Din53370 Din53370	 150 microns 380 microns
2.	**Elongation at break**[2] In production-length direction In cross direction	 Din53455 Din53455	 < 100 % < 100 %
3.	**Dimensional stability**[3]	Finat 14	< 0.40 %
4.	**Degree of gloss** Minimum (measuring angle 20°)	Din67530	not measurable because of the structure of the material
5.	**Adhesion strength**[4] After 20 minutes After 24 hours	 Finat 1 Finat 1	 18 N/25mm 20 N/25mm
6.	**Quickstick**[5]	Finat 9	11 N
7.	**Expected outdoor life span**[6]	-	Tests in progress Expectation = 5 years
8.	**Temperature range** At application At use	 - -	 +5°C to +40°C -25°C to +80°C
9.	**Colour back print**	-	red
10.	**Flammability** If applied on aluminium, glass, steel = self-extinguishing		

Storage instructions

All Grafitack 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 Grafitack 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 Grafitack Carbon 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 !
- 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.
- In order to remove the film again, it should be heated thoroughly in order to prevent adhesive transfer. Due to the structure of the material, the film can tear while being removed.

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 Grafitack materials may vary slightly. The indicated value is an average value, obtained from a series of measurements. With structured materials, the deviation from the guide value is larger than with even materials.

2)
The elongation at break of the Grafitack 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 %. This value is measured by applying the film on aluminium, 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. 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).