# **GRAFITACK ETCHED GLASS SERIES**

# **REFERENCES TR111 to TR114**

Released on 4<sup>th</sup> July 2018

## Description

The Grafitack Etched Glass Series (references TR111 to TR114) is a soft cadmium-free polymeric calendered PVC, provided with a pressure-sensitive permanent acrylic **<u>air escape</u>** adhesive. This adhesive is protected by a highquality structured silicone paper. A good recognizability is guaranteed by the red print on the material's backing paper.

## Composition

1			
	Film	:	80 micron thick polymeric calendered PVC film
	Adhesive	:	permanent pressure-sensitive solvent-based acrylic air escape adhesive, with a high resistance
			against UV-radiation, chemical products and humidity.
	Backing paper	:	structured siliconised PE-paper of 165 gr/m <sup>2</sup>
		:	against UV-radiation, chemical products and humidity.

# Application

The Grafitack Etched Glass films enable you to create the most stunning decorations on mirrors, glass doors, shop windows, etc...

## Product advantages

Thanks to the air escape adhesive, the films can be applied dry with ease (wet application not recommended).

## **Product specifications**

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

		Test method	Result			
1.	Thickness <sup>1</sup>					
	Thickness vinyl	Din53370	80 micron			
	Thickness vinyl + glue + backing paper	Din53370	295 micron			
2.	Elongation at break <sup>2</sup>					
	In production-length direction	Din53455	120 %			
	In cross direction	Din53455	140 %			
3.	Dimensional stability <sup>3</sup>	Finat 14	< 0.40 mm			
4.	Degree of gloss					
	Minimum (measuring angle 85°)	Din67530	8 GU (gloss units)			
	Maximum (measuring angle 85°)	Din67530	18 GU (gloss units)			
5.	Adhesion strength <sup>4</sup>					
	After 20 minutes	Finat 1	15 N/25mm			
	After 24 hours	Finat 1	18 N/25mm			
6.	Quickstick <sup>5</sup>	Finat 9	14 N			
7.	Expected outdoor life span <sup>6</sup>	-	TR111-TR113 : 4-5 years			
			TR114 : 1 year			
8.	Temperature range					
	At application	-	+10°C to +40°C			
	At use	-	-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 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 !

After applying the material, the structure of the backing paper may be slightly visible, however, this will disappear automatically after some time.

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.

If several strips of TR film are applied next to each other, they always have to be applied in the same direction.

#### Tip

If you wish to remove the film after a while, we advise you to use a heat gun. If any glue residues stay behind on the glass surface after taking off the film, you can simply remove them by moistening them with soap-water. Leave this to soak in for a couple of minutes, and then chip it off by means of a steel scraper (also used for removing paint stains).

#### 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.

#### <u>1)</u>

The thickness of the Grafitack materials may vary slightly. The indicated value is an average value, obtained from a series of measurements.

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.

#### <u>3)</u>

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.

<u>4)</u>

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.

#### <u>6)</u>

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 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".