# STONE CHIP PROTECTION FILM

## **REFERENCE P110G**



Reviewed on 3rd July 2018

## Description

Grafityp Stone Chip Protection Film P110G is a soft cadmium free glossy polymeric calendered PVC film, provided with a pressure-sensitive permanent acrylic glue. The glue is protected by a high-quality silicone paper. This seamless stone chip protection film has especially been created for protecting vehicles against stone chips, scratches, etc....

### Composition

Film	: 110 micron thick polymeric calendered glossy vinyl film with an excellent resistance against
	stone chips, scratches, UV-light, chemical products, humidity, dirt,
Glue	: solvent-based pressure-sensitive permanent acrylic glue
Backing paper	: siliconised clay-coated paper of 120 gr/m <sup>2</sup>

## Application

The Stone Chip Protection film P110G has been developed especially for protecting your vehicle against stone chips. Grafityp Stone Chip Protection Films are "Paint Protection Films". They are not suited for long term protection of head lights.

## **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 film	Din53370	110 micron	
	Thickness film + glue + backing paper	Din53370	250 micron	
2.	Elongation at break <sup>2</sup>			
	In production length direction	Din53455	> 130 %	
	In cross direction	Din53455	> 150 %	
3.	Dimensional stability <sup>3</sup>	Finat 14	< 0.40 mm	
4.	Degree of Gloss			
	Minimum (measuring angle 20°)	Din67530	50 GU (gloss units)	
5.	Adhesion strength <sup>4</sup>			
	After 20 minutes	Finat 1	16 N/25mm	
	After 24 hours	Finat 1	20 N/25mm	
6.	<u>Quickstick<sup>5</sup></u>	Finat 9	10 N	
7.	Expected outdoor life span <sup>6</sup>	-	3.5 to 5 years (vertical)	
8.	Temperature range			
	At application	-	+5°C up to +40°C	
	At use	-	-20°C up to +90°C	
9.	Colour back print	-	grey	
10.	Flammability			
	If applied on aluminium, glass, steel = self-extinguishing			

### Storage instructions

All Grafityp 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 Grafityp Stone Chip Protection film 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 Grafityp Stone Chip Protection films can be stored for a period of two years.

## 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 stone chip films may vary slightly. The indicated value is an average value, obtained from a series of measurements. 2)

The elongation at break of the stone chip films 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 in mm. This value is measured by applying the film on aluminium (10x10cm), and placing it in a hotair 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. For more detailed information we also refer to our general "Warranty Certificate" and to our "General Terms and Conditions of Sale and Delivery".