

# STONE CHIP PROTECTION FILM

## 120 MICRON

### REFERENCE SCP01

Reviewed on the 23<sup>rd</sup> of September 2013

#### PROVISIONAL SPECIFICATIONS



#### Description

The Stone Chip Protection film SCP01 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 cars against stone chips.

#### Composition

Film	: 120 micron thick polymeric calendered glossy vinyl film with an excellent resistance against UV-light, chemical products, humidity and dirt
Glue	: solvent-based pressure-sensitive permanent acrylic glue. This glue does not have an aggressive reaction on the printout
Backing paper	: siliconised clay-coated paper of 120 gr/m <sup>2</sup>

#### Application

The Stone Chip Protection film SCP01 has been developed especially for protection your vehicle against stone chips.

Grafityp Stone Chip Protection Films are "Paint Protection Films". They are not suited for the protection of head lights.

#### Product Specifications

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

		Test method	Result
1.	<u>Thickness<sup>1</sup></u> Thickness film Thickness film + glue + backing paper	Din53370 Din53370	120 micron 260 micron
2.	<u>Elongation at break<sup>2</sup></u> In production length direction In cross direction	Din53455 Din53455	> 375 % > 375 %
3.	<u>Dimensional stability<sup>3</sup></u>	Finat 14	< 0,20 mm
4.	<u>Degree of Gloss</u> Minimum (measuring angle 20°)	Din67530	50 GU (gloss units)
5.	<u>Adhesion strength<sup>4</sup></u> After 20 minutes After 24 hours	Finat 1 Finat 1	15 N/25mm 20 N/25mm
6.	<u>Quickstick<sup>5</sup></u>	Finat 9	6,5 N
7.	<u>Expected outdoor life span<sup>6</sup></u>	-	Tests in progress Expectation = 3 to 5 years
8.	<u>Temperature range</u> At application At use	- -	+5°C up to +40°C -20°C up to +70°C
9.	<u>Colour back print</u>	-	neutral
10.	<u>Flammability</u> If applied on aluminium, glass, steel = self-extinguishing		

## Storage instructions

All Stone Chip Protection 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 Stone Chip Protection 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 Stone Chip Protection materials can be stored for a period of two years.

## Remarks

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.

The Stone Chip Protection films come with an additional protective layer which should be removed after application in order to guarantee a perfect transparency.

## 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 Stone Chip Protection materials 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 Protection materials may vary slightly. The indicated value is a minimum value, obtained from a series of measurements.

**3)** The dimensional stability is the shrinkage 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. The life span can also differ, depending on the colour (due to the 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".

# STONE CHIP PROTECTION FILM

## 240 MICRON

### REFERENCE SCP02

Reviewed on the 23<sup>rd</sup> of September 2013

#### PROVISIONAL SPECIFICATIONS



#### Description

The Stone Chip Protection film SCP02 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 cars against stone chips.

#### Composition

Film	: 240 micron thick polymeric calendered glossy vinyl film with an excellent resistance against UV-light, chemical products, humidity and dirt
Glue	: solvent-based pressure-sensitive permanent acrylic glue. This glue does not have an aggressive reaction on the printout
Backing paper	: siliconised clay-coated paper of 120 gr/m <sup>2</sup>

#### Application

The Stone Chip Protection film SCP02 has been developed especially for protection your vehicle against stone chips.

Grafityp Stone Chip Protection Films are "Paint Protection Films". They are not suited for the protection of head lights.

#### Product Specifications

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

		Test method	Result
1.	<u><b>Thickness<sup>1</sup></b></u> Thickness film Thickness film + glue + backing paper	Din53370 Din53370	240 micron 380 micron
2.	<u><b>Elongation at break<sup>2</sup></b></u> In production length direction In cross direction	Din53455 Din53455	> 385 % > 385 %
3.	<u><b>Dimensional stability<sup>3</sup></b></u>	Finat 14	< 0.20 mm
4.	<u><b>Degree of Gloss</b></u> Minimum (measuring angle 20°)	Din67530	50 GU (gloss units)
5.	<u><b>Adhesion strength<sup>4</sup></b></u> After 20 minutes After 24 hours	Finat 1 Finat 1	12 N/25mm 19 N/25mm
6.	<u><b>Quickstick<sup>5</sup></b></u>	Finat 9	10,5 N
7.	<u><b>Expected outdoor life span<sup>6</sup></b></u>	-	Tests in progress Expectation = 3 to 5 years
8.	<u><b>Temperature range</b></u> At application At use	- -	+5°C up to +40°C -20°C up to +70°C
9.	<u><b>Colour back print</b></u>	-	neutral
10.	<u><b>Flammability</b></u> If applied on aluminium, glass, steel = self-extinguishing		

## Storage instructions

All Stone Chip Protection 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 Stone Chip Protection 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 Stone Chip Protection materials can be stored for a period of two years.

## Remarks

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.

The Stone Chip Protection films come with an additional protective layer which should be removed after application in order to guarantee a perfect transparency.

## Important

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**1)** The thickness of the Stone Chip Protection materials 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 Protection materials may vary slightly. The indicated value is a minimum value, obtained from a series of measurements.

**3)** The dimensional stability is the shrinkage 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. The life span can also differ, depending on the colour (due to the pigmentation).

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