

Technical Data Sheet.

Permasolid® HS SpectroFlex Surfacer 5400.

Permasolid® HS SpectroFlex Surfacer 5400 is an innovative coloured 2K HS surfacer system based on new generation acrylic resins. The system comprises six coloured surfacers (white, black, yellow, red, green, blue), which can be mixed with each other using simple mixing formulae. This system is VOC compliant in all combinations.

Field of application:

As interior colour, as non-sanding surfacer, as sanding surfacer.

As interior colour and non-sanding surfacer:

- easy and versatile application
- good levelling
- very fast flash-off
- very good paint flow
- excellent vertical stability
- very high coverage

As sanding surfacer.

- good sanding properties
- excellent filling power
- very good drying properties
- long pot life

For professional use only!

VR Technical Data Sheet No. EN / 5400 / 00



Substrate.

Suitable substrates:

1. Steel, electroplated/roller galvanized steel or soft aluminium, cleaned, sanded and coated with Priomat® Wash Primer 4075, Priomat® 1K Wash Primer 4085.
2. OEM primer, finely sanded or unsanded and thoroughly cleaned.
3. Lightly sanded old or original paintwork (except TPA).
4. Surfaces treated with Raderal® 2K polyester products and then finely sanded.
5. UP-GF substrates, free of release agents, cleaned and sanded.

Substrate pretreatment:



Clean all substrates carefully with Permaloid® Silicone Remover 7010 or Permaloid® Silicone Remover 7799.



Sand lightly.



Before further treatment carefully clean substrate with a suitable cleaning agent to remove dust and residues.

Application as interior colour.

Mixing ratio:



2:1 by volume with
Permasolid® HS Hardener 3307 extra fast
Permasolid® HS Hardener 3309 fast
Permasolid® HS Hardener 3310
Permasolid® HS Hardener 3312 slow
Permasolid® HS Hardener 3315 extra slow

(see VR Technical Data Sheet No. 3307_3315)



3:1 by volume with
Permasolid® VHS Hardener 3220 fast
Permasolid® VHS Hardener 3225
Permasolid® VHS Hardener 3230 slow
Permasolid® VHS Hardener 3240 extra slow

(see VR Technical Data Sheet No. 3220_3240)





Pot life:

Ready for use 50 - 60 minutes at +20°C.
(depending on hardener used)

Additive:

Permasolid® SpectroFlex Additive 5407

Method of application:

	Compliant	HVLP
	16 - 19 seconds	
	HS Hardener: 20 % VHS Hardener: 40 %	
	1.2 - 1.4 mm	1.3 - 1.5 mm
	1.5 - 3.0 bar	-
	-	0.7 bar
	1 - 3 coats at 30 - 70 µm dry film thickness. Further coats may be necessary, depending on the colour!	
	When used as interior colour, it is not necessary to recoat with top coat.	

Application viscosity
4 mm, +20°C, DIN 53211:

Additive at
+20°C material temperature:

Spray nozzle*:

Spray pressure*:

Atomising pressure*:

Number of coats:

Special notes:

Application as non-sanding surfacer.

Mixing ratio:



2:1 by volume with
Permasolid® HS Hardener 3309 fast
Permasolid® HS Hardener 3310
Permasolid® HS Hardener 3312 slow
Permasolid® HS Hardener 3315 extra slow

(see VR Technical Data Sheet No. 3307_3315)



3:1 by volume with
Permasolid® VHS Hardener 3225
Permasolid® VHS Hardener 3230 slow
Permasolid® VHS Hardener 3240 extra slow

(see VR Technical Data Sheet No. 3220_3240)

Elastification:

See "Special notes"!

Pot life:

Ready for use 60 minutes at +20°C.
(depending on hardener used)

Additive:

Permasolid® SpectroFlex Additive 5407

* See manufacturer's instructions!

Method of application:



Compliant

HVLP

Application viscosity
4 mm, +20°C, DIN 53211:



16 - 19 seconds

Additive at
+20°C material temperature:



HS Hardener: 20 - 30 %
VHS Hardener: 40 - 50 %

Spray nozzle*:

1.2 - 1.4 mm

1.3 - 1.5 mm

Spray pressure*:

2.0 - 2.5 bar

-

Atomising pressure*:

-

0.7 bar

Number of coats:



1 - 2 coats
at 20 - 30 µm dry film thickness

Flash-off time for
application as non-sanding
sufacer before top coat
application at +20°C ambient
temperature:



30 - 120 minutes with
Permahyd® Base Coat 280/285
30 - 120 minutes with
Permahyd® Hi-TEC Base Coat 480.
15 - 120 minutes with
Permasolid® HS Top Coat 275

Fast spot-repair system.

Flash-off time for
application as non-sanding
sufacer before top coat
application



15 minutes with
Permasolid® HS Hardener 3307 extra fast
Permasolid® VHS Hardener 3220 fast

Additive at
+20°C material temperature:



Permasolid® SpectroFlex Additive 5407
HS Hardener: 20 - 30 %
VHS Hardener: 40 - 50 %

Reducer at +20°C material
temperature:



10 % MS Dura plus 8580

Recoat with:

- Permahyd® Base Coat 280/285 or Permahyd® Hi-TEC Base Coat 480 and Permasolid® 2K clear coat
- Permasolid® HS Automotive Top Coat 275

* See manufacturer's instructions!

Application as sanding surfacer.

Mixing ratio:



4:1 by volume with

Permasolid® HS Hardener 3307 extra fast

Permasolid® HS Hardener 3309 fast

Permasolid® HS Hardener 3310

Permasolid® HS Hardener 3312 slow

Permasolid® HS Hardener 3315 extra slow

(see VR Technical Data Sheet No. 3307_3315)



7:1 by volume with

Permasolid® VHS Hardener 3220 fast

Permasolid® VHS Hardener 3225

Permasolid® VHS Hardener 3230 slow

Permasolid® VHS Hardener 3240 extra slow

(see VR Technical Data Sheet No. 3220_3240)

Elastification:

See "Special notes"!

Pot life:

Ready for use 90 - 120 minutes at +20°C.
(depending on hardener used)

Reducer:

Permacron® MS Dura Plus 8580

Permacron® Reducer 3364

Permacron® Reducer 3380

Permacron® Reducer 3365 slow

Permacron® Reducer 3385 slow

Method of application:

Application viscosity
4 mm, +20°C, DIN 53211:

Reducer at
+20°C material temperature:





Spray nozzle*:

Spray pressure*:

Atomising pressure*:

Number of coats:

Maximum
dry film thickness:

	Compliant	HVLP
	18 - 20 seconds	
	HS Hardener: 15 % VHS Hardener: 25 %	
	1.3 - 1.7 mm	1.3 - 1.5 mm
	2.0 - 2.5 bar	-
	-	0.7 bar
	2 - 4 coats (depending on spray nozzle)	
	With air drying 200 µm With forced drying 150 µm With IR drying 150 µm for light colours With IR drying 120 µm for dark colours	

Drying.

Air drying:



Sanding at +20°C ambient temperature:

60 - 150 µm 3 - 4 hours
150 - 200 µm overnight

Force drying:



Flash-off time: 5 - 15 minutes

Infrared drying:



Drying time at +60°C metal temperature:

60 - 150 µm 30 - 35 minutes



Flash-off time: 5 - 10 minutes



Drying time: medium wave radiator short wave radiator

60 - 150 µm 15 minutes 2 minutes at half power and
(light colours) 8 minutes at full power

60 - 120 µm 15 minutes 2 minutes at half power and
(dark colours) 8 minutes at full power

* See manufacturer's instructions!

Recoating.

Dry sanding:



With random orbital sander and dust extraction P400 - 500

Wet sanding:



With P800 - 1000

Recoat with:

- Permahyd® Base Coat 280/285 or Permahyd® Hi-TEC Base Coat 480 and Permasolid® 2K clear coat
- Permasolid® HS Automotive Top Coat 275

Special notes:

For countries outside the EU or usage other than vehicle refinishing:

As an alternative, Permacron Base Coat/2K MS top coat can be used if not banned by the VOC Directive 2004/42/EC and if available.

Special notes.



1. Elastification of rigid and halfrigid types of plastic:
First, add 15 % of Permasolid® Elastic Additive 9050 to the surfacer.

Application as non-sanding surfacer*:

- HS hardener - 2:1 with 30% SpectroFlex Additive 5407
- VHS hardener - 3:1 with 40% SpectroFlex Additive 5407

Application as sanding surfacer**:

- HS hardener - 3:1 + 10% reducer
- VHS hardener - 4:1 + 20% reducer



- * The elastified surfacer must be allowed to flash-off for 45 minutes at +20°C ambient temperature before application of Permahyd® Base Coat 280/285 or Permahyd® Hi-TEC Base Coat 480.



- ** When applied as sanding surfacer, allow for 45 minutes force drying.

2. To facilitate sanding, apply Permaloid® Control Paint black each time before sanding. Do not spray onto wet surfacer.
3. Any substrate defects can be treated with Raderal® putty. After drying and intermediate sanding, isolate putty spots with:
Permasolid® HS SpectroFlex Surfacer 5400

4. When isolating certain spots - even on problem substrates - the best results are achieved with a medium film thickness of 60 - 120 µm in 2 coats, after either air drying overnight or force drying/IR drying. With problem substrates, careful pretreatment is imperative and the surfacer must be applied to the entire area.
5. For isolating thermoplastic paintwork we recommend Permasolid® HS Vario Surfacer 8590.
6. For air drying we recommend a minimum temperature of +15°C, or +8°C if Permasolid® HS Hardener 3307 extra fast is used.

Data

Flash point:

+23 °C

VOC content:

2004/42/IIB(c)(540)540

The EU limit value for this product (product category IIB.c) in ready to use form is max. 540 g/l of VOC.

The VOC content of this product in ready to use form is max. 540 g/l.

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