Permasolid®
Spectro Surfacer 5400

GENERAL

DESCRIPTION
A 3.5 lbs/gal compliant, 2K high solid system offering diverse application qualities. It may be used as an under hood color, sanding surfacer, or as a non-sanding surfacer.

The system includes six colored surfacers (white, black, yellow, red, green, and blue). Using this system, colors can be mixed according to mixing formulas. These colors are displayed in a set of color chips.

Permasolid® Spectro Surfacer 5400 is a high solids product with excellent filling power. It is also a fast wet-on-wet system for recoating with Permacron® Base Coat Series 293/295 or Permahyd® Hi-TEC 480.

The products referenced herein may not be available for sale in your market. Please consult your distributor for product availability.

MIXING

COMPONENTS
Permasolid® Spectro Surfacer 5400

PERMASOLID HS HARDENERS
Permasolid® HS Hardener 3307 Express,
Permasolid® HS Hardener 3309 Extra Fast,
Permasolid® HS Hardener 3310 Fast,
Permasolid® HS Hardener 3315 Medium,
Permasolid® HS Hardener 3320 Slow, or
Permasolid® HS Hardener 3325 Extra Slow

Or

PERMASOLID VHS HARDENERS
Permasolid® VHS Hardener 3220 Express,
Permasolid® VHS Hardener 3230 Medium,
Permasolid® VHS Hardener 3240 Slow, or
Permasolid® VHS Hardener 3245 Extra Slow

For optimum hardener selection, refer to TDS # 061 or 3220-3245.

REDUCERS
Permacron® Dura Plus 8580,
Permacron® Reducer 3363 Medium, or
Permacron® Reducer 3365 Slow

For optimum reducer selection, refer to TDS # 780.0.

ADDITIONS
Permasolid® Spectro Additive 5407
Permasolid® Elastic Additive 9050 (before hardener)
MIX RATIO – WET-ON-WET SEALER / UNDER HOOD COLOR

SEALER / UNDER HOOD COLOR WITH HS HARDENERS
Component
5400
3307 / 3309 / 3310 / 3315 / 3320 / 3325
5407
Volume
2
1
+20-30%

ELASTIC SEALER / UNDER HOOD COLOR WITH HS HARDENERS
Component
5400
9050
3307 / 3309 / 3310 / 3315 / 3320 / 3325
5407
Volume
2
+30%
1
+20-30%

SEALER / UNDER HOOD COLOR WITH VHS HARDENERS
Component
5400
3220 / 3230 / 3240 / 3245
5407
Volume
3
1
+40-50%

ELASTIC SEALER / UNDER HOOD COLOR WITH VHS HARDENERS
Component
5400
9050
3220 / 3230 / 3240 / 3245
5407
Volume
3
+30%
1
+40-50%

APPLICATION VISCOSITY

As a Wet-on-Wet Sealer / Under Hood Color: 17-21 seconds at 68°F/20°C, DIN 4
As an Elastic Wet-on-Wet Sealer / Under Hood Color: 16-18 seconds at 68°F/20°C, DIN 4

POT LIFE

As a Wet-on-Wet Sealer / Under Hood Color: Approximately 60 minutes at 68°F/20°C when ready to spray.

MIX RATIO – MEDIUM BUILD SANDING SURFACER

SANDING SURFACER WITH HS HARDENERS
Component
5400
3307 / 3309 / 3310 / 3315 / 3320 / 3325
8580 / 3363 / 3365
Volume
4
1
+15%

ELASTIC SANDING SURFACER WITH HS HARDENERS
Component
5400
9050
3307 / 3309 / 3310 / 3315 / 3320 / 3325
8580 / 3363 / 3365
Volume
2
+30%
1
+15%

SANDING SURFACER WITH VHS HARDENERS
Component
5400
Volume
7
ELASTIC SANDING SURFACER WITH VHS HARDENERS

<table>
<thead>
<tr>
<th>Component</th>
<th>Volume</th>
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</thead>
<tbody>
<tr>
<td>5400</td>
<td>3</td>
</tr>
<tr>
<td>9050</td>
<td>+30%</td>
</tr>
<tr>
<td>3220 / 3230 / 3240 / 3245</td>
<td>1</td>
</tr>
<tr>
<td>8580 / 3363 / 3365</td>
<td>+25%</td>
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APPLICATION VISCOSITY

As a Sanding Surfer: 18-20 seconds at 68°F/20°C, DIN 4

POT LIFE

As a Sanding Surfer: Approximately 60 minutes at 68°F/20°C when ready to spray.

SPECIAL TIPS

1. In order to make sanding easier, apply a guide coat each time before sanding.
2. When isolating certain spots, the best results are achieved with a medium film thickness of 3.0 – 5.0 mil (80 -120 µm) in approximately 2 coats and overnight air drying or low baking/IR drying, even on problem substrates. With problem substrates, careful pretreatment is imperative, and the surfacer must be applied to the entire area.
3. When air drying we recommend a minimum temperature of 59°F/15°C or 46°F/8°C if Permasolid® HS Hardener 3307 Express is used.
4. Sanded surface should be re-sanded if not top-coated within 8 hours.
5. When used as an interior color, top coat is not necessary.
6. When finishing plastics please refer to VR Technical Data Sheet No. 901.1
7. When using VHS Hardeners, be sure the mixture is stirred very thoroughly.
8. * Final 5% of Permasolid® Spectro Additive 5407 can be exchanged for Permacron® Reducers. See mixing options in ColorNet® and mix on the scale for accuracy.

APPLICATION

SUBSTRATES

Thoroughly degreased, non-sanded or lightly sanded E-coat
Original or old paintwork (except reversible substrates).
Properly prepared fiberglass with no exposed fibers.
Raderal® Polyester products
Priomat®, Permasolid®, and Permahyd® Primers and Surfacers

SURFACE PREPARATION

- Degrease and sand.
- Prior to applying a sanding surfer, sand body filler with P180 or finer grit sandpaper and/or sand feather edge areas with P180, then P240, and finish with P320.
- For wet-on-wet sealer application, finish sand with P400.
- Before further treatment, clean all substrates thoroughly with Permaloid® Silicone Removers 7087 or 7010 Slow, Permahyd® Silicone Remover 7085, or Permahyd® Silicone Remover 7096.

*Special Note - In order to ensure optimum corrosion protection, we recommend to coat areas of bare metal including small sand through spots with Priomat® Wash Primer 4075, Priomat® Primer 3255 Red Brown, or Priomat® 1K Primer Surfer 4085.

SPRAYGUN SETUP

<table>
<thead>
<tr>
<th>HVLPI</th>
<th>Sealer Approved Transfer Efficiency</th>
<th>Surfacer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3-1.4mm</td>
<td>1.2-1.3mm</td>
<td>1.5-1.8mm</td>
</tr>
</tbody>
</table>

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Please refer to gun manufacturer and local legislation for proper spray pressure recommendations.

**APPLICATION**
- As a Wet-on-Wet Sealer: Option 1 – 1 medium coat followed by 1 full coat without intermediate flash-off.
- As a Wet-on-Wet Sealer: Option 2 – 2 coats with approx. 5 minutes intermediate flash-off between coats.
- As a Wet-on-Wet Sealer: Recoat with Permacron® Base Coat Series 293/295 after 15 minutes to max. 30 minutes.
- As a Wet-on-Wet Sealer: Recoat with Permahyd® Hi-TEC 480 after 30 minutes to max. 120 minutes.
- As a Medium Build Sanding Surfacer: Apply 2 – 4 coats with approx. 5-10 minutes intermediate flash-off between coats.

**RECOMMENDED FILM THICKNESS**
- As a Wet-on-Wet Sealer / Under Hood Color: 1-2 coats for 1.0 - 1.7 mil dry film thickness
- As a Wet-on-Wet Elastic Sealer: 1.5 coats for 0.6 - 1.2 mil dry film thickness

- As a Medium Build Sanding Surfacer: 3-4 coats for 8.0 mil max dry film thickness - air drying
- 3-4 coats for 6.0 mil max dry film thickness - forced drying
- As an Elastic Medium Build Sanding Surfacer: 2-3 coats for 3.0 - 6.0 mil dry film thickness

**DRY TIMES**

**AIR DRYING – MEDIUM BUILD SANDING SURFACER**
Drying time at 68°F/20°C:
- 3-4 hours at 2.5 – 6.0 mil
- 12 hours at 6.0 – 8.0 mil

**LOW BAKE**
Flash-off time:
- 5-15 minutes
Drying time at 140°F/60°C metal temp.:
- Approx. 30 minutes at 2.5 – 6.0 mil

**INFRARED DRYING**
Flash-off time:
- 5-10 minutes
  1. Short wave: Approx. 10 minutes depending on film thickness
  2. Medium wave: Approx. 10-15 minutes depending on film thickness

**DRY SANDING**
Dry Sanding with random orbital sander and dust extraction
- Initial sanding: P320
- Final sanding: P500 – 800

**WET SANDING**
- Initial sanding: P320
- Final sanding: P600 – 800

**RECOAT**
With Permacron® Base Coat Series 293/295 or Permahyd® Hi-TEC 480
ADDITIONAL INFORMATION

To use the individual colors of Permasolid® Spectro Surfacer 5400, use the following codes under the Maker “Spectro Surfacer 5400” in ColorNet®.

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<th>Color</th>
<th>Code</th>
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<tr>
<td>White</td>
<td>100</td>
<td>84076</td>
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<tr>
<td>Black</td>
<td>165</td>
<td>84155</td>
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<tr>
<td>Blue</td>
<td>131</td>
<td>84108</td>
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<td>Green</td>
<td>143</td>
<td>84132</td>
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<tr>
<td>Red</td>
<td>118</td>
<td>84094</td>
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<tr>
<td>White</td>
<td>107</td>
<td>84083</td>
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PHYSICAL PROPERTIES

Coating Category: Sealer (Wet-on-Wet Sealer / Underhood Color with HS Hardeners)
Max. VOC (AP/LE): 527 g/l; 4.4 lbs/gal
Avg. Gallon Weight: 1343.5 g/l; 11.21 lbs/gal
Avg. Weight % Volatiles: 39.2 %
Avg. Weight % Water: 0.1%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.1%
Avg. Volume % Exempt Solvent: 0.0%
Theoretical Coverage: 661.5 sq. ft @ 1 mil
Theoretical Coverage @ Recommended Film Build: 389–662 sq. ft.

Coating Category: Primer (Sanding Surfacer with HS Hardeners)
Max. VOC (AP/LE): 539 g/l; 4.5 lbs/gal
Avg. Gallon Weight: 1469.8 g/l; 12.26 lbs/gal
Avg. Weight % Volatiles: 36.4 %
Avg. Weight % Water: 0.1%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.1%
Avg. Volume % Exempt Solvent: 0.0%
Theoretical Coverage: 650.5 sq. ft @ 1 mil
Theoretical Coverage @ Recommended Film Build: 81–108 sq. ft.

Coating Category: Sealer (Elastic Sealer with HS Hardeners)
Max. VOC (AP/LE): 491 g/l; 4.1 lbs/gal
Avg. Gallon Weight: 1274.9 g/l; 10.6 lbs/gal
Avg. Weight % Volatiles: 38.9 %
Avg. Weight % Water: 0.1%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.1%
Avg. Volume % Exempt Solvent: 0.0%
Theoretical Coverage: 714.1 sq. ft @ 1 mil
Theoretical Coverage @ Recommended Film Build: 595–1190 sq. ft.

Coating Category: Primer (Elastic Sanding Surfacer with HS Hardeners)
Max. VOC (AP/LE): 503 g/l; 4.2 lbs/gal
Avg. Gallon Weight: 1317.6 g/l; 10.9 lbs/gal
Avg. Weight % Volatiles: 38.6 %
Avg. Weight % Water: 0.1%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.1%
Avg. Volume % Exempt Solvent: 0.0%
Theoretical Coverage: 703.5 sq. ft @ 1 mil
Theoretical Coverage @ Recommended Film Build: 176–235 sq. ft.

**Coating Category:** Primer (Wet-on-Wet Sealer/ Underhood Color with VHS Hardeners)
Max. VOC (AP/LE): 503 g/l; 4.2 lbs/gal
Avg. Gallon Weight: 1332.0 g/l; 11.11 lbs/gal
Avg. Weight % Volatiles: 38.1 %
Avg. Weight % Water: 0.1%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.1%
Avg. Volume % Exempt Solvent: 0.0%

Theoretical Coverage: 686.2 sq. ft. @ 1 mil
Theoretical Coverage @ Recommended Film Build: 404-686 sq. ft.

**Coating Category:** Primer (Sanding Surfacer with VHS Hardeners)
Max. VOC (AP/LE): 539 g/l; 4.5 lbs/gal
Avg. Gallon Weight: 1468.8 g/l; 12.26 lbs/gal
Avg. Weight % Volatiles: 36.9 %
Avg. Weight % Water: 0.1%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.1%
Avg. Volume % Exempt Solvent: 0.0%

Theoretical Coverage: 635.7sq. ft. @ 1 mil
Theoretical Coverage @ Recommended Film Build: 80–106 sq. ft.

**Coating Category:** Sealer (Elastic Sealer with VHS Hardeners)
Max. VOC (AP/LE): 479 g/l; 4.0 lbs/gal
Avg. Gallon Weight: 1265.1 g/l; 10.56 lbs/gal
Avg. Weight % Volatiles: 37.8 %
Avg. Weight % Water: 0.1%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.1%
Avg. Volume % Exempt Solvent: 0.0%

Theoretical Coverage: 737.4 sq. ft. @ 1 mil
Theoretical Coverage @ Recommended Film Build: 615–1229 sq. ft.

**Coating Category:** Primer (Elastic Sanding Surfacer with VHS Hardeners)
Max. VOC (AP/LE): 443 g/l; 3.7 lbs/gal
Avg. Gallon Weight: 1331.5 g/l; 11.11 lbs/gal
Avg. Weight % Volatiles: 33.2 %
Avg. Weight % Water: 0.1%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.1%
Avg. Volume % Exempt Solvent: 0.0%

Theoretical Coverage: 805.4 sq. ft. @ 1 mil
Theoretical Coverage @ Recommended Film Build: 134–269 sq. ft.
VOC REGULATED AREAS

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

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