



Permasolid® HS Vario Surfacer 8590



GENERAL

DESCRIPTION

A high-quality acrylic surfacer from our “2K-Acryl-System” for partial and full passenger car refinishes.

Its versatility enables application at both normal and medium film thicknesses with intermediate sanding and also wet-on-wet adhesion promoter application. The good absorption of overspray and excellent leveling provide outstanding results.

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



MIXING

COMPONENTS

Permasolid® HS Vario Surfacer 8590 Gray

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.

ADDITIVES

Permasolid Elastic Additive 9050 (before hardener)

MIX RATIO – WET-ON-WET ADHESION PROMOTER

ADHESION PROMOTER WITH HS HARDENERS

Component	Volume
8590	3
3307 / 3309 / 3310 / 3315 / 3320 / 3325	1
8580 / 3363 / 3365	+20-30%



ADHESION PROMOTER WITH VHS HARDENERS

Component	Volume
8590	5
3220 / 3230 / 3240 / 3245	1
8580 / 3363 / 3365	+30-40%

APPLICATION VISCOSITY

As an Adhesion Promoter: 15 to 16 Seconds at 68°F/20°C, DIN 4

POT LIFE

As an Adhesion Promoter: Approximately 30-45 minutes at 68°F/20°C when ready to spray.

MIX RATIO – MEDIUM BUILD SANDING SURFACER

MEDIUM BUILD SANDING SURFACER WITH HS HARDENERS

Component	Volume
8590	3
3307 / 3309 / 3310 / 3315 / 3320 / 3325	1
8580 / 3363 / 3365	+5-10%

ELASTIC SANDING SURFACER WITH HS HARDENERS

Component	Volume
8590	3
9050	+30%
3307 / 3309 / 3310 / 3315 / 3320 / 3325	1
8580 / 3363 / 3365	+5-10%

MEDIUM BUILD SANDING SURFACER WITH VHS HARDENERS

Component	Volume
8590	5
3220 / 3230 / 3240 / 3245	1
8580 / 3363 / 3365	+10-20%

ELASTIC SANDING SURFACER WITH VHS HARDENERS

Component	Volume
8590	5
9050	+30%
3220 / 3230 / 3240 / 3245	1
8580 / 3363 / 3365	+10-20%

APPLICATION VISCOSITY

As a Sanding Surfacers: 20 to 25 Seconds at 68°F/20°C, DIN 4

POT LIFE

As a Sanding Surfacers: Approximately 20-40 minutes at 68°F/20°C when ready to spray.

MIX RATIO – ELASTIC WET-ON-WET SEALER

ELASTIC SEALER WITH HS HARDENERS

Component	Volume
8590	3
9050	+30%
3307 / 3309 / 3310 / 3315 / 3320 / 3325	1
8580 / 3363 / 3365	+20%



ELASTIC SEALER WITH VHS HARDENERS

Component	Volume
8590	5
9050	+30%
3220 / 3230 / 3240 / 3245	1
8580 / 3363 / 3365	+10-20%

APPLICATION VISCOSITY

As an Elastic Wet-on-Wet Sealer: 15-16 Seconds at 68°F/20°C, DIN 4

POT LIFE

As an Elastic Wet-on-Wet Sealer: Approximately 30-45 minutes at 68°F/ 0°C when ready to spray.

SPECIAL TIPS

1. In order to make sanding easier, apply guide coat before sanding. Do not spray onto wet surfacer.
2. When air drying a minimum temperature of 55°F/13°C must be maintained or 46°F/8°C when using Permasolid HS Hardener 3307 Express.
3. Do not apply wet-on-wet adhesion promoter over reversible substrates, only over e-coat.
4. When using VHS Hardeners, be sure the mixture is stirred very thoroughly.
5. See ColorNet® product retrieval for mixing with VHS Hardeners.



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 Surfacer

SURFACE PREPARATION

- Degrease and sand.
- Prior to applying a sanding surfacer, sand body filler with P180 or finer grit sandpaper and/or sand feather edge areas with P180, then P240, and finish with P320.
- Before further treatment, clean all substrates thoroughly with:
 - Permaloid® Silicone Removers 7087 or 7010 Slow, Permahyd Silicone Removers 7085, 7086 or 7096.
 - Axalta™ Silicone Remover 200 Slow, Axalta Silicone Remover 205A Spray, Axalta Silicone Remover 210 Water or Axalta Silicone Remover 220 Low VOC.

*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 Surfacer 4085.

SPRAYGUN SETUP

	Sealer	Surfacer
HVLP	1.3-1.4mm	1.4-1.7mm
Approved Transfer Efficiency	1.2-1.3mm	1.4-1.7mm

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



APPLICATION

- As a Wet-on-Wet Adhesion Promoter: Option 1 – 1 medium coat followed by 1 full coat without intermediate flash-off.
- As a Wet-on-Wet Adhesion Promoter: Option 2 – 2 coats with approx. 5 minutes intermediate flash-off between coats.
- As a Wet-on-Wet Adhesion Promoter: Recoat after 15-20 minutes or by 8 hours at 68°F/20°C.
- As a Medium Build Sanding Surfacer: Apply 2 – 3 coats with approx. 5-10 minutes intermediate flash-off between coats.

RECOMMENDED FILM THICKNESS

As a Wet-on-Wet Adhesion Promoter: Approximately 0.6 mil dry film thickness

As a Medium Build Sanding Surfacer: Approximately 2.0 – 5.0 mils dry film thickness



DRY TIMES

AIR DRYING – MEDIUM BUILD SANDING SURFACER

Drying time at 68°F/20°C: 12 hours

LOW BAKE

Flash-off time: 5 minutes

Drying time at 140°F/60°C metal temp.: 20-30 minutes at 2.0 – 3.5 mils

40-50 minutes at 4.0 – 4.5 mils

INFRARED DRYING

Flash-off time: 5 minutes

1. Short wave: Approx. 10 minutes depending on film thickness

2. Medium wave: Approx. 10-20 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.



PHYSICAL PROPERTIES

Coating Category: Adhesion Promoter (with HS Hardeners)

Max. VOC (AP/LE): 587 g/l; 4.9 lbs/gal
 Avg. Gallon Weight: 1298.0 g/l; 10.83 lbs/gal
 Avg. Weight % Volatiles: 45.1 %
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0 %
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0 %

Theoretical Coverage: 575.5 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 959 sq. ft.

Coating Category: Adhesion Promoter (with VHS Hardeners)

Max. VOC (AP/LE): 587 g/l; 4.9 lbs/gal
 Avg. Gallon Weight: 1305.9 g/l; 10.9 lbs/gal
 Avg. Weight % Volatiles: 44.5 %
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0 %
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0 %

Theoretical Coverage: 578.4 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 964 sq. ft.

Coating Category: Primer (Sanding Surfacer with HS Hardeners)

Max. VOC (AP/LE): 527 g/l; 4.4 lbs/gal
 Avg. Gallon Weight: 1366.9 g/l; 11.41 lbs/gal
 Avg. Weight % Volatiles: 38.3 %
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0 %
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0 %

Theoretical Coverage: 680.1 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 136-340 sq. ft.

Coating Category: Primer (Sanding Surfacer with VHS Hardeners)

Max. VOC (AP/LE): 527 g/l; 4.4 lbs/gal
 Avg. Gallon Weight: 1370.4 g/l; 11.44 lbs/gal
 Avg. Weight % Volatiles: 38.3 %
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0 %
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0 %

Theoretical Coverage: 674.8 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 134-337 sq. ft.

Coating Category: Primer (Elastic Sanding Surfacer with HS Hardeners)

Max. VOC (AP/LE): 479 g/l; 4.0 lbs/gal
 Avg. Gallon Weight: 1298.4 g/l; 10.83 lbs/gal
 Avg. Weight % Volatiles: 37.3 %
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0 %
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0 %



Theoretical Coverage: 749.4 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 149-375 sq. ft.

Coating Category: Primer (Elastic Sanding Surfacer with VHS Hardeners)
 Max. VOC (AP/LE): 479 g/l; 4.0 lbs/gal
 Avg. Gallon Weight: 1300.7 g/l; 10.85 lbs/gal
 Avg. Weight % Volatiles: 37.3 %
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0 %
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0 %

Theoretical Coverage: 745.3 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 149-372 sq. ft.

Coating Category: Sealer (Elastic Sealer With HS Hardeners)
 Max. VOC (AP/LE): 515 g/l; 4.3 lbs/gal
 Avg. Gallon Weight: 1266.8 g/l; 10.57 lbs/gal
 Avg. Weight % Volatiles: 41.1 %
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0 %
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0 %

Theoretical Coverage: 686.9 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 1144 sq. ft.

Coating Category: Sealer (Elastic Sealer with VHS Hardeners)
 Max. VOC (AP/LE): 479 g/l; 4.0 lbs/gal
 Avg. Gallon Weight: 1301.7 g/l; 10.86 lbs/gal
 Avg. Weight % Volatiles: 37.3 %
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0 %
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0 %

Theoretical Coverage: 746.4 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 1244 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 SDS 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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