



Permasolid®

1K UV Starlight Primer Surfacer 9002



GENERAL

DESCRIPTION

A one component UV curable primer surfacer that was developed with speed and productivity in mind. This medium build primer surfacer is easy to apply, lays down smooth, and offers significantly reduced process cycle time. It can be applied, then cured with an Axalta™ Multipurpose UV light, and will be ready to sand in seconds.

Permasolid® 1K UV Starlight Primer Surfacer 9002 is available in a 1 liter and is also conveniently packaged in an aerosol can.

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



MIXING

COMPONENTS

Permasolid 1K UV Starlight Primer Surfacer 9002

MIX RATIO

Ready-to-spray

APPLICATION VISCOSITY

As mixed at 68°F/20°C, DIN 4

POT LIFE

Unlimited (when stored in a container that does not allow the transmittance of light)

SPECIAL TIPS

- Material is ready-to-spray; no reduction is recommended.
- Material is translucent; do not spray to hiding because film thickness will exceed recommendations, and the primer will not cure completely.
- Apply a guide coat before sanding to ensure proper and thorough sanding.
- Sanding is required for all recoating.
- Thoroughly shake and stir 9002 prior to each use. If the UV primer is allowed to sit for more than 15 minutes, material should be re-stirred.
- Do not place 9002 on a mixing machine if it cannot be used within two weeks.
- It is important to use the recommended air pressures. Using reduced air pressures may result in higher film build, which will affect the ability of the UV primer to cure.
- Due to the potential safety and related hazards of working with UV light equipment, follow all instructions for use provided by the equipment manufacturer.
- The Axalta™ Multipurpose UV Light should be turned on when it is time to apply the first coat of 9002. This will ensure that the light has been warmed up properly and is ready for the curing process.
- For best results, verify cure rate with a Dosimeter. 100 mJ/cm² of UV exposure is required per mil of dry film build to ensure cure of the UV primer.
- When using the Axalta™ Multipurpose UV Light wand, pass over the UV primer surfacer 2-3 times using a technique as if painting. Use a cross coat method and make sure to use a 75% overlap at a wand distance of 2-3 inches. Other than adding more heat, additional passes of the UV light will not have a negative effect on the UV primer surfacer.



- Passing the Axalta™ Multipurpose UV light wand over the primed surface, moldings, plastic trim, lights, or etc. too slowly may result in metal temperatures over 180°F. Avoid overheating the UV primed part during the curing process.
- Product must not be cured with outdoor UV exposure using sunlight.
- 9002 should not be stored in transparent cups, such as PPS cups, or in guns with clear air caps.
- 9002 can be used all day in the gun or opaque cup. Recommend pouring 9002 back into the can. It is not necessary to clean after each use.
- For optimum corrosion protection, we recommend coating areas of bare metal with Axalta™ Etch Primer Low VOC 425, Axalta™ 1K Primer Surfacer 400A Dark Gray Spray and 410A Light Gray Spray, or Axalta™ Etch Primer 420.



APPLICATION

SUBSTRATES

Bare Steel
 Galvanized Steel
 Aluminum
 Thoroughly degreased, sanded E-coat.
 Axalta™ 300 or 305 Plastic Polyolefin Adhesion Promotor
 Axalta™ Etch Primer Low VOC 425
 Axalta™ Etch Primer 420

Original or old paintwork (except reversible substrates, Example: lacquer)

SURFACE PREPARATION

1. Thoroughly clean surface as per Axalta™ Silicone Remover TDS
2. Use a scuff pad first to scuff areas to be primed where sanding with DA is not possible
3. Use a DA sander to featheredge OEM paint at the repair area
4. Use P180 sandpaper to remove any straight line scratches
5. Begin featheredge process by stepping through P240, P320, and finish with P600 making sure to remove the previous grit's sand scratches
6. Be sure to sand 6-8" beyond featheredge for proper primer adhesion
7. Clean the surface as per Axalta™ Silicone Remover TDS

SPRAYGUN SETUP

HVLP	1.3-1.4mm
*Approved Transfer Efficiency	1.3-1.4mm

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

Using reduced air pressures may result in higher film build, which will affect the ability of the UV primer to cure.

APPLICATION – AEROSOL PRIMER

- Apply 2-3 coats with 1 minute intermediate flash-off between coats.
- Do not spray to opacity.

APPLICATION – SPRAYABLE PRIMER

- Apply 2 coats with 1 minute intermediate flash-off between coats.
- Do not spray to opacity.

RECOMMENDED FILM THICKNESS

- 4.0 – 5.0 mil dry film thickness



DRY TIMES

UV CURE – DRY FOR SANDING

Flash-off time:

3 minutes

Drying time and temp.:

See UV Cure tables below

UV Cure Table				
New UV Wand/Lamp	Required Exposure	No. of Passes	% Overlap	Wand Distance to the Primed Surface (Inches)
Axalta Multipurpose UV Lamp 115V E-5450	100 mJ/cm ² per mil of dry film build	2-3	50 - 75	2-3
Axalta Multipurpose UV Lamp 220V E-5465	100 mJ/cm ² per mil of dry film build	2-3	50 - 75	2-3

UV Cure Table			
UV Lamp	Distance to the Primed Surface (Inches)	Cure Area	Cure Time
400 Watt Lamp	15 inches	10" x 10"	90 seconds
1200 Watt Lamp	10 inches	10" x 10"	60 seconds
1200 Watt Lamp	15 inches	16" x 16"	120 seconds

SPECIAL NOTE

While providing a convenience and cost saving product, most commercially available LED UV curing lights do not reach 100mJ/cm² of energy per mil. Lower energy UV lights can cure the top surface of the UV primer, allowing it to be sanded. However, many will not provide complete through cure unless exposure times are increased to 15 minutes and beyond. This is also the case with attempting to cure UV primer outdoors under sunlight. Solar exposure does not achieve the energy level and exposure angle required full through cure. Full through cure is required to provide optimum performance and durability.

RECOAT WITH ITSELF

When recoating Permasolid® 1K UV Starlight Primer surfacer 9002 with itself, sanding is required prior to recoating

OVERCOAT

After sanding, the appropriate Permasolid or Permahyd sealer may be applied per TDS.

TOPCOAT

After sanding, the appropriate Permacron Base Coat Series 293/295 or Permahyd Hi-TEC 480 may be applied. Refer to the topcoat TDS for specific sanding instructions.



PHYSICAL PROPERTIES

Coating Category: Auto Body Primer - Maximum 80% VOC and 0.95 MIR

Avg. Gallon Weight: 912 g/l; 7.61 lbs/gal

Avg. Weight % Volatiles: 62.8%

Avg. Weight % Water: 0.0%

Avg. Weight % Exempt Solvent: 21.6 %

Avg. Volume % Water: 0.0%

Avg. Volume % Exempt Solvent: 24.9%

Theoretical Coverage: 363.4 sq. ft. @ 1 mil

Theoretical Coverage @ Recommended Film Build: 73 - 91 sq. ft.

Coating Category: Primer

Avg. VOC AP: 165 g/l; 1.4 lbs/gal

Avg. VOC LE: 249 g/l; 2.1 lbs/gal

Avg. Gallon Weight: 1142 g/l; 9.53 lbs/gal

Avg. Weight % Volatiles: 38.2%

Avg. Weight % Water: 0.0%

Avg. Weight % Exempt Solvent: 23.8%

Avg. Volume % Water: 0.0%

Avg. Volume % Exempt Solvent: 33.9%

Theoretical Coverage: 755 sq. ft. @ 1 mil

Theoretical Coverage @ Recommended Film Build: 157 - 197 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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