



# 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, cured with UV light, and 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

1. Material is ready-to-spray; no reduction is recommended.
2. Material is translucent; do not spray to hiding because film thickness will exceed recommendations and the primer will not cure completely.
3. Apply a guide coat before sanding to ensure proper and thorough sanding.
4. Sanding is required for all recoating.
5. 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.
6. Do not place 9002 on a mixing machine if it cannot be used within two weeks.
7. 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.
8. Due to the potential safety and related hazards of working with UV light equipment, follow all instructions for use provided by the equipment manufacturer.
9. The Axalta UV LightCoat™ wand/lamp 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.
10. For best results, verify cure rate with a Dosimeter. 100 mJ/cm<sup>2</sup> of UV exposure is required per mil of dry film build to ensure cure of the UV primer.
11. When using the Axalta UV LightCoat™ 2400 watt wand/lamp, pass over the UV primer surfacer 3 times using a technique similar to painting using a cross coat method, making sure to use a 50 – 75% overlap and a gun distance of 3 – 6 inches. Other than adding more heat, additional passes of the UV light will not have a negative effect on the UV primer surfacer.



12. When using the Axalta UV LightCoat™ *Mini* (1100 watt) wand/lamp, pass over the UV primer surfacer 5 times using a technique similar to painting using a cross coat method, making sure to use a 50 – 75% overlap and a gun distance of 3 – 6 inches. Other than adding more heat, additional passes of the UV light will not have a negative effect on the UV primer surfacer.
13. Passing the Axalta UV LightCoat™ wand/lamp 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.
14. Product should not be cured with outdoor UV exposure.
15. 9002 should not be stored in transparent cups, such as PPS cups, or in guns with clear air caps.
16. 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.
17. In order to guarantee optimum corrosion protection, we recommend coating areas of bare metal with Priomat® Wash Primer 4075, Priomat® 1K Primer Surfacer 4085, or Priomat® 5.5 Wash Primer 4055 Gray.
18. If needed, 9002 may be topcoated with Permasolid® Surfacer or Wet-on-Wet Sealer.



## APPLICATION

### SUBSTRATES

Bare Steel  
 Galvanized Steel  
 Aluminum  
 Thoroughly degreased, **sanded** E-coat.  
 Original or old paintwork (except reversible substrates, Example: lacquer)  
 Priomat® Primers  
 Permasolid® EP Primer Surfacer 4500 Light Gray  
 Priomat® Elastic Primer 3304 Transparent  
 Priomat® 1K Elastic Polyolefin Adhesion Promoter 3304

### SURFACE PREPARATION

- Degrease and sand.
- Before further treatment, clean all substrates thoroughly with Permaloid® Silicone Removers 7087 or 7010 Slow, Permahyd® Silicone Remover 7085, or Permahyd® Silicone Remover 7096.

### 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                                | # of Passes | % Overlap | Gun Distance to the Primed Surface (Inches) |
| Axalta UV LightCoat™<br>2,400 E-5287 | 100 mJ/cm <sup>2</sup> per mil of dry film build | 3           | 50 - 75   | 3 - 6                                       |
| Axalta UV LightCoat™<br>Mini E-5294  | 100 mJ/cm <sup>2</sup> per mil of dry film build | 5           | 50 - 75   | 3 - 6                                       |

| 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 |

**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:** 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 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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