



# Permacron<sup>®</sup> Transparent Midcoat Repair Process



## GENERAL

### DESCRIPTION

Permacron<sup>®</sup> Transparent Midcoat 9100 can be used to repair various special OEM colors. These tinted midcoats can be used over either Permacron<sup>®</sup> Base Coat Series 293/295 or Permahyd<sup>®</sup> Hi-TEC 480.

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



## MIXING

### COMPONENTS

9100  
9045 / 9049 / 9056 / 9057 / 9058

### REDUCERS

Permasolid<sup>®</sup> Low VOC Reducer 3394 Medium

### PERMASOLID LOW VOC HARDENERS

Permasolid<sup>®</sup> Low VOC Hardeners 3194 Medium  
Permasolid<sup>®</sup> Low VOC Hardeners 3196 Slow

or

### REDUCERS

Permacron<sup>®</sup> Reducer 3363 Medium  
Permacron<sup>®</sup> Reducer 3365 Slow

### PERMASOLID VHS HARDENERS

Permasolid<sup>®</sup> VHS Hardener 3240 Slow  
Permasolid<sup>®</sup> VHS Hardener 3245 Extra Slow

## MIX RATIO

### PERMASOLID LOW VOC HARDENERS

Component	Volume
Permacron 9100	1
3394	1
3194 / 3196	+3%

### APPLICATION VISCOSITY

15-16 seconds at 68°F/20°C, DIN 4

### PERMASOLID VHS HARDENERS

Component	Volume
Permacron 9100	1
3363 / 3365	1
3240 / 3245	+3%



**APPLICATION VISCOSITY**

15-16 seconds at 68°F/20°C, DIN 4

**POT LIFE**

8 hours at 68°F/20°C when ready to spray

**SPECIAL TIPS**

1. A tack coat is not required, but can be applied to normalize surface tension and help control application as tint strength increases
2. Reducer can be lowered to 50% if more than 3 coats are required to achieve the color position. A separate let down panel is suggested, more blend room may be required with this higher strength midcoat.



**APPLICATION**

**SUBSTRATES**

Permacron® Base Coat Series 293/295 (ground coat)  
 (See Technical Data Sheet 970.10 or 970.13)  
 Permahyd® Hi-TEC 480 (ground coat)  
 (See Technical Data Sheet 480)

**SPRAYGUN SETUP**

HVLP	1.3-1.4mm
Approved Transfer Efficiency	1.2-1.3mm

Please refer to gun specification requirement provided by the manufacturer, and local legislation for proper spray pressure recommendations.

**APPLICATION**

- 1-3 coats as needed for color match with 5 minutes intermediate flash-off between coats.

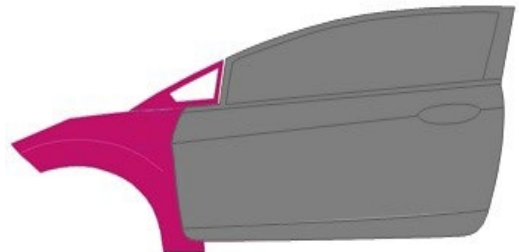
**Transparent Midcoat Repair Process with Permacron® Base Coat Series 293/295**

**1. Check color:**

Create a let-down panel to establish # Of coats of **tinted midcoat** needed for color match.

**2. Base coat application:**

Mask the blend panel to protect blend area from overspray (optional).  
Apply Permacron® Base Coat Series 293/295.

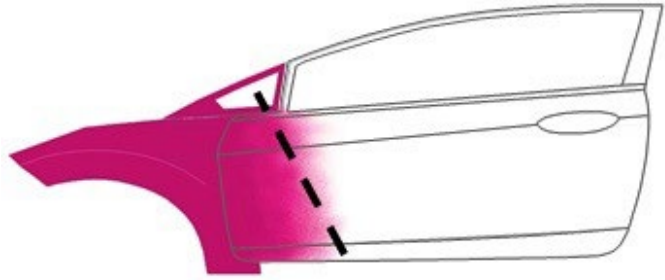


For flash-off times, please refer to the Permacron® Base Coat Series 293/295 TDS.



**3. Blending the base coat:**

Remove the masking paper if used.  
Blend the base coat normally.  
(Refer to Permacron® Base Coat Series 293/295 TDS)  
Pay close attention to overspray drift.



For flash-off times, please refer to the Permacron® Base Coat Series 293/295 TDS.

**4. Blending the tinted midcoat:**  
(See common step 4 below)

OR

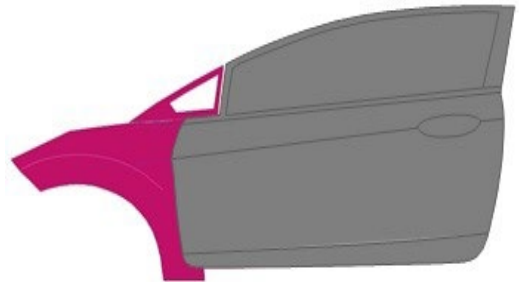
**9100 Midcoat Repair Process with Permahyd® Hi-TEC 480**

**1. Check color:**

Create a let-down panel to establish # Of coats of **tinted midcoat** needed for color match.

**2. Base coat application:**

Mask the blend panel to protect blend area from overspray.  
Apply Permahyd® Hi-TEC 480.



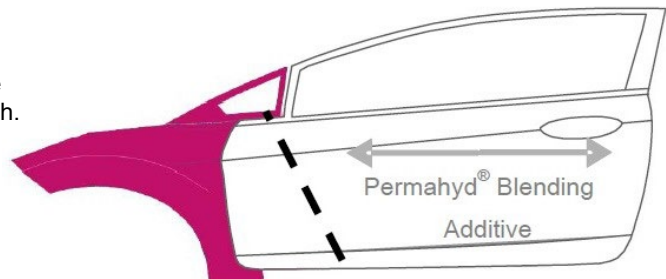
Apply base coat.  
1.5 coats



For flash-off times, please refer to the Permahyd® Hi-TEC 480 TDS.

**3. Blending the basecoat:**

Remove the masking paper.  
Apply Permahyd® Blending Additive 1050 or 1051. Do not allow it to flash.





Blend Permahyd® Hi-TEC 480 into adjacent panel, spraying with reduced pressure (minimum 20-24 psi). Pay close attention to avoid overspray drift. Use outside in blend technique.



Blending the base coat.  
1 spray operation



For flash-off times, please refer to the Permahyd® Hi-TEC 480 TDS.

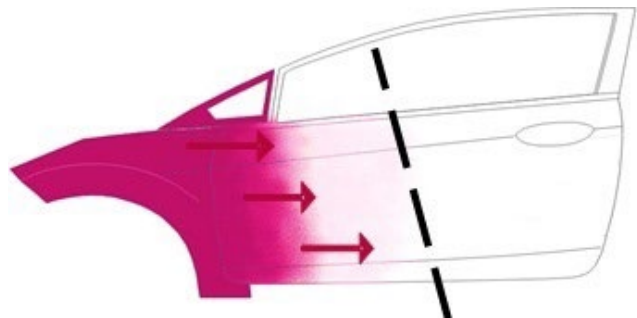
**4. Blending the tinted midcoat:**  
(See common step 4 below)

**4. Blending the tinted midcoat:**

Recoat the base coat with a single coat of **tinted midcoat** and verify color match. Apply additional coat(s) of **tinted midcoat** with minimal flash (2-5 minutes between coats), as needed to achieve color match (generally only 2 coats are required).

For highly pigmented mid coats, a light open coat, flashed for approximately 1 minute is suggested.

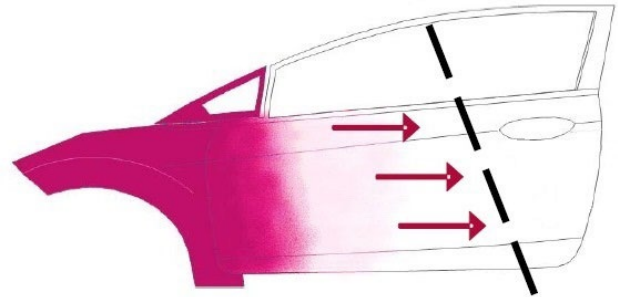
Important Note: The **tinted midcoat** should not be applied over the entire blend panel or a darker color will result at the end of the panel.



Fade out zone of the **tinted midcoat**.



Stagger **tinted midcoat** with each new application for best results.



Fade out zone of the **tinted midcoat**.



### DRY TIMES

Flash-off time: 20-30 minutes  
 Drying time at 100°F/55°C metal temp.: 10 minutes  
 \* After baking, allow panel(s) to cool completely.

Max re-coat time after activation and application: 8 hours

Maximum time before top coating: 24 hours. Light scuff required after longer than 24 hours.



A careful intermediate sanding with P1000-P2000 is optional.



### APPLICATION

Apply 1.5-2.0 coats of Permacron® or Permasolid® clear coat.



### DRY TIMES

Please refer to the TDS of the respective Permacron® or Permasolid® clear coat used for dry time recommendations.

### PHYSICAL PROPERTIES

**Coating Category:** Color Coating (1:1 Reduction Low VOC Hardener)  
 Max. VOC (AP): 108.7 g/l; 0.91 lbs/gal  
 Max. VOC (LE): 3995.95 g/l; 3.30 lbs/gal  
 Avg. Gallon Weight: 1092 g/l; 9.11 lbs/gal  
 Avg. Weight % Volatiles: 84.7%  
 Avg. Weight % Water: 0.2%  
 Avg. Weight % Exempt Solvent: 74.5%  
 Avg. Volume % Water: 0.2%

**Coating Category:** Color Coating (2:1 Reduction Low VOC Hardener)  
 Max. VOC (AP): 143.57 g/l; 1.20 lbs/gal  
 Max. VOC (LE): 395.83 g/l; 3.30 lbs/gal  
 Avg. Gallon Weight: 1106 g/l; 9.23 lbs/gal  
 Avg. Weight % Volatiles: 80.0%  
 Avg. Weight % Water: 0.2%  
 Avg. Weight % Exempt Solvent: 66.8%  
 Avg. Volume % Water: 0.2%

**Coating Category:** Color Coating (1:1 Reduction VHS Hardener)  
 Max. VOC (AP): 560.7 g/l; 4.7 lbs/gal  
 Max. VOC (LE): 729.4 g/l; 6.1 lbs/gal  
 Avg. Weight % Volatiles: 83.5%



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## 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.

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## 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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