



# Permacron® Base Coat Series 293



## GENERAL

### DESCRIPTION

A high quality base coat from our “Basis-System” for all two-stage finishes. It is suitable for universal use on all passenger vehicles. All solid and metallic colors can be mixed with the Permacron® mixing system and are lead free.

When recoated with Permacron® or Permasolid® Clear Coat, the result is a high gloss, weather resistant top coat.

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



## MIXING

### COMPONENTS

Permacron® Base Coat Series 293

### REDUCERS

Permacron® Supercryl Reducer 3055 Express,  
Permacron® Supercryl Reducer 3054 Medium,  
Permacron® Supercryl Reducer 3056 Slow, or  
Permacron® Base Coat Retarder 9015

*For optimum reducer selection, refer to TDS # 780.0.*

### OPTIONAL COMPONENTS

### HARDENERS

Permasolid® HS Hardeners,  
Permasolid® VHS Hardeners, or  
Permasolid® Low VOC Hardeners

*For optimum hardener selection, refer to TDS # 061, 3220-3245, or 062.*

### ADDITIVES

Permacron® 1K Base Coat Blender 8560

*Refer to TDS # 906.6.*

## MIX RATIO

### STANDARD MIXING Component

Base Coat Series 293  
3055 / 3054 / 3056  
Or  
3056 / 9015

### Volume

1  
+ 40-50%  
  
+ 35% 3056 and + 15% 9015  
(In hot & humid conditions)



**OPTIONAL MIXING WITH HARDENER - FOR OEM WARRANTY REPAIR**

**PERMASOLID HS HARDENERS**

<b>Component</b>	<b>Volume</b>
Base Coat Series 293	1
3307 / 3309 / 3310 / 3315 / 3320 / 3325	+ 15%
3055 / 3054 / 3056	+ 40-50%
Or	
3056 / 9015	+ 35% 3056 and + 15% 9015 (In hot & humid conditions)

**PERMASOLID VHS HARDENERS**

<b>Component</b>	<b>Volume</b>
Base Coat Series 293	1
3220 / 3230 / 3240 / 3245	+ 10%
3055 / 3054 / 3056	+ 40-50%
Or	
3056 / 9015	+ 35% 3056 and + 15% 9015 (In hot & humid conditions)

**PERMASOLID LOW VOC HARDENERS**

<b>Component</b>	<b>Volume</b>
Base Coat Series 293	1
3192 / 3194 / 3196	+ 10%
3055 / 3054 / 3056	+ 40-50%
Or	
3056 / 9015	+ 35% 3056 and + 15% 9015 (In hot & humid conditions)

**APPLICATION VISCOSITY**

17 - 21 seconds at 68°F/20°C, DIN 4

**POT LIFE**

Unlimited (in sealed container)  
Pot life of hardened basecoat is 8 hours.

**SPECIAL TIPS**

1. For high-metallic colors, Permacron® Supercryl Reducer 3056 Slow will help with metallic orientation.
2. Use of Permacron® Supercryl Reducer 3055 Express should be limited to small area repairs and cut-ins.
3. Permacron® 1K Base Coat Blender 8560 can be used to lower the opacity of Permacron® Base Coat Series 293/295 colors for blending 2 stage and 3 stage systems.
4. Permacron® Base Coat Series 293 factory pack colors, FP 2002 and FP 2003, should not be re-coated with other Permacron® Base Coat Series 293/295 colors. When used for multi-color finishes however, FP 2002 and FP 2003 may be applied over other Permacron® Base Coat Series 293/295 colors.
5. Maximum recoat window for hardened basecoat is 8 hours.
6. \* **When mixing color formulas containing 30% or more MB551, add only 30% Permacron® Supercryl Reducers 3055 Express, 3054 Medium, or 3056 Slow.**



**APPLICATION**

**SUBSTRATES**

- Original or old paintwork (except reversible substrates)
- Primat® Surfacer
- Permacron® Primer/Surfacer
- Permahyd® Primer/Surfacer
- Permasolid® Primer/Surfacer

**SURFACE PREPARATION**

- Degrease and sand.
- Prior to applying base coat, final dry sand surfacer with P500-P800 or final wet sand surfacer with P600-P800.
- For blend areas, scuff hard to reach areas with a fine, gold, sanding pad (3M 07745) and/or use Permahyd® Sanding Paste 1120 and then DA with P1000. NOTE: using a small amount of Permahyd® Silicone Remover 7085 as a lubricant while sanding is preferred.
- Clean the entire area thoroughly before applying base coat with Permaloid® Silicone Remover 7010 Slow, Permahyd® Silicone Remover 7085, or Permahyd® Silicone Remover 7096.

**SPRAYGUN SETUP**

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

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

**APPLICATION**

- 2-4 coats with 5 - 10 minutes intermediate flash-off between coats.

**RECOMMENDED FILM THICKNESS**

2 coats for 0.6 - 0.8 mil dry film thickness  
 4 coats for 0.8 - 1.7 mil dry film thickness

**BLEND-IN SYSTEM**

**Blend-in System for Metallic and Solid Two-Stage colors:**

- Apply a full coat of Permacron® Base Coat Series 293 to completely cover the surfacer area at ready-to-spray viscosity.
- Spray each coat a little further into the blend area.
- Spray over into the blend area at the same viscosity but with reduced pressure.
- After approximately 15 minutes flash-off time, Permacron® or Permasolid® Clear Coat may be applied.



**DRY TIMES**

**AIR DRYING**

Drying time at 68°F/20°C:  
 Flash-off time prior to clear coat: 10-15 minutes depending on reducer used

**RECOAT**

With Permacron® or Permasolid® Clear Coat



**PHYSICAL PROPERTIES**

**Coating Category:** Color Coating (Standard Mix)

Max. VOC (AP/LE): 583 g/l; 4.9 lbs/gal  
 Avg. Gallon Weight: 931.4 g/l; 7.77 lbs/gal  
 Avg. Weight % Volatiles: 83.8 %  
 Avg. Weight % Water: 0.2%  
 Avg. Weight % Exempt Solvent: 0.0%  
 Avg. Volume % Water: 0.2%  
 Avg. Volume % Exempt Solvent: 0.0%

**Coating Category:** Color Coating (Standard Mix – Hot & Humid)

Max. VOC (AP/LE):583 g/l; 4.9 lbs/gal  
 Avg. Gallon Weight: 934.6 g/l; 7.80 lbs/gal  
 Avg. Weight % Volatiles: 83.8 %  
 Avg. Weight % Water: 0.2%  
 Avg. Weight % Exempt Solvent: 0.0%  
 Avg. Volume % Water: 0.2%  
 Avg. Volume % Exempt Solvent: 0.0%

**Coating Category:** Color Coating (HS Hardeners)

Max. VOC (AP/LE): 583 g/l; 4.9 lbs/gal  
 Avg. Gallon Weight: 938.2 g/l; 7.83 lbs/gal  
 Avg. Weight % Volatiles: 81.2 %  
 Avg. Weight % Water: 0.2%  
 Avg. Weight % Exempt Solvent: 0.0%  
 Avg. Volume % Water: 0.1%  
 Avg. Volume % Exempt Solvent: 0.0%

**Coating Category:** Color Coating (HS Hardeners – Hot & Humid)

Max. VOC (AP/LE): 583 g/l; 4.9 lbs/gal  
 Avg. Gallon Weight: 941.4 g/l; 7.86 lbs/gal  
 Avg. Weight % Volatiles: 81.3 %  
 Avg. Weight % Water: 0.1%  
 Avg. Weight % Exempt Solvent: 0.0%  
 Avg. Volume % Water: 0.1%  
 Avg. Volume % Exempt Solvent: 0.0%

**Coating Category:** Color Coating (VHS Hardeners)

Max. VOC (AP/LE): 583 g/l; 4.9 lbs/gal  
 Avg. Gallon Weight: 939.3 g/l; 7.84 lbs/gal  
 Avg. Weight % Volatiles: 80.4 %  
 Avg. Weight % Water: 0.2%  
 Avg. Weight % Exempt Solvent: 0.0%  
 Avg. Volume % Water: 0.1%  
 Avg. Volume % Exempt Solvent: 0.0%

**Coating Category:** Color Coating (VHS Hardeners – Hot & Humid)

Max. VOC (AP/LE): 583 g/l; 4.9 lbs/gal  
 Avg. Gallon Weight: 939.3 g/l; 7.84 lbs/gal  
 Avg. Weight % Volatiles: 80.4 %  
 Avg. Weight % Water: 0.2%  
 Avg. Weight % Exempt Solvent: 0.0%  
 Avg. Volume % Water: 0.1%  
 Avg. Volume % Exempt Solvent: 0.0%



**Coating Category:** Color Coating (Low VOC Hardeners)

Max. VOC (AP): 571 g/l; 4.8 lbs/gal  
Max. VOC (LE): 583 g/l; 4.9 lbs/gal  
Avg. Gallon Weight: 945.1 g/l; 7.89 lbs/gal  
Avg. Weight % Volatiles: 81.3 %  
Avg. Weight % Water: 0.2%  
Avg. Weight % Exempt Solvent: 2.8%  
Avg. Volume % Water: 0.1%  
Avg. Volume % Exempt Solvent: 1.9%

**Coating Category:** Color Coating (Low VOC Hardeners – Hot & Humid)

Max. VOC (AP): 571 g/l; 4.8 lbs/gal  
Max. VOC (LE): 583 g/l; 4.9 lbs/gal  
Avg. Gallon Weight: 948 g/l; 7.91 lbs/gal  
Avg. Weight % Volatiles: 81.4 %  
Avg. Weight % Water: 0.2%  
Avg. Weight % Exempt Solvent: 2.8%  
Avg. Volume % Water: 0.1%  
Avg. Volume % Exempt Solvent: 1.9%

Theoretical Coverage: 205.4 sq. ft. @ 1 mil  
Theoretical Coverage @ Recommended Film Build: 256 - 342 sq. ft.

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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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