



# Permacron® MS Clear Coat 8180



## GENERAL

### DESCRIPTION

A National Rule VOC compliant, high gloss clear coat from our “2K-Acryl-System” designed for panel and overall repairs that performs well in low air flow, air dry, and low bake environments. Its fast setting and through drying result in both time and cost savings for all production applications. The versatility of this product enables application in either one operation or two coats.

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



## MIXING

### COMPONENTS

Permacron® MS Clear Coat 8180

### 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  
Permacron® Reducer 3365 Slow, or  
Permasolid® Accelerator 9025

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

### ADDITIVES

Permasolid® Elastic Additive 9050

### MIX RATIO

#### PERMASOLID VHS HARDENERS

Component	Volume
8180	3
3220 / 3230 / 3240 / 3245	1
8580 / 3363 / 3365 / 9025	+10%

#### ELASTIC CLEAR - PERMASOLID VHS HARDENERS

Component	Volume
8180	3
9050	+15-30%
3220 / 3230 / 3240 / 3245	1
8580 / 3363 / 3365 / 9025	+10%



**SPECIAL TIPS**

- Using fast or express hardeners (VHS: 3220) can speed up the dry time of the Permacron® MS Clear Coat 8180 significantly when Permasolid® Accelerator 9025 is used. Fast or express hardeners should be used when spraying cut-ins and small parts or a single panel and/or in extreme cold conditions.
- Medium hardeners (VHS: 3230) should be used when repairing bumpers and/or 2 to 3 exterior panels.
- Slow hardeners (VHS: 3240 or 3245) should be used when spraying large exterior panels, a complete repair, and/or in extreme hot conditions.

**APPLICATION VISCOSITY**

Approximately 16-18 seconds at 68°F/20°C, DIN 4

**POT LIFE**

Approximately 1-1.5 hours at 68°F/20°C when ready to spray.



**APPLICATION**

**SUBSTRATES**

Permacron® Base Coat Series 293/295  
 Permahyd® Hi-TEC 480  
 Fully cured OEM or existing topcoat (non-reversible)

**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**

- Option 1: Apply 1 medium coat followed by 1 full coat without intermediate flash-off.
- Option 2: Apply 2 coats with approx. 5 to 10 minutes intermediate flash-off between coats.

**RECOMMENDED FILM THICKNESS**

2.0-2.5 mil dry film thickness



**DRY TIMES**

**AIR DRYING**

Drying time at 68°F/20°C:	
Dust free:	30 minutes
Dry for assembly:	4 to 5 hours
Time to deliver:	12 hours

**LOW BAKE**

Flash-off time:	5 to 10 minutes
Drying time at target metal temperature:	20 to 30 minutes at 140°F/60°C

**INFRARED DRYING**

Flash-off time:	5 to 10 minutes
1. Short wave:	Approximately 8-12 minutes
2. Medium wave:	Approximately 12-14 minutes

**RECOAT/RE-REPAIR**

Clearcoat may be recoated any time after the bake cycle. If recoating after 24 hours scuff sand with 1200-1500 grit



## PHYSICAL PROPERTIES

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

Max. VOC (AP): 491 g/l; 4.1 lbs/gal  
 Max. VOC (LE): 491 g/l; 4.1 lbs/gal  
 Avg. Gallon Weight: 991.5 g/l; 8.27 lbs/gal  
 Avg. Weight % Volatiles: 50.2%  
 Avg. Weight % Water: 0.0%  
 Avg. Weight % Exempt Solvent: 0.0%  
 Avg. Volume % Water: 0.0%  
 Avg. Volume % Exempt Solvent: 0.0%

Theoretical Coverage: 702.7 sq. ft. @ 1 mil  
 Theoretical Coverage @ Recommended Film Build: 281– 351 sq. ft.

**Coating Category:** Clear Coating (Elastic VHS Hardeners)

Max. VOC (AP): 455 g/l; 3.8 lbs/gal  
 Max. VOC (LE): 455 g/l; 3.8 lbs/gal  
 Avg. Gallon Weight: 1013.7 g/l; 8.46 lbs/gal  
 Avg. Weight % Volatiles: 44.7%  
 Avg. Weight % Water: 0.0%  
 Avg. Weight % Exempt Solvent: 0.0%  
 Avg. Volume % Water: 0.0%  
 Avg. Volume % Exempt Solvent: 0.0%

Theoretical Coverage: 786.3 sq. ft. @ 1 mil  
 Theoretical Coverage @ Recommended Film Build: 315 - 393 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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