



Permacron® MS Clear Coat 8180



GENERAL

DESCRIPTION

A 5.0 lb/gal (600 g/l) 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 HS HARDENERS

Permasolid® HS Hardener 3307 Express,
Permasolid® HS Hardener 3309 Extra Fast,
Permasolid® HS Hardener 3310 Fast,
Permasolid® HS Hardener 3315 Medium,
Permasolid® HS Hardener 3320 Slow, or
Permasolid® HS Hardener 3325 Extra Slow

Or

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 HS HARDENERS

| Component | Volume |
|---|--------|
| 8180 | 2 |
| 3307 / 3309 / 3310 / 3315 / 3320 / 3325 | 1 |



ELASTIC CLEAR - PERMASOLID HS HARDENERS

| Component | Volume |
|---|---------------|
| 8180 | 2 |
| 9050 | +15-30% |
| 3307 / 3309 / 3310 / 3315 / 3320 / 3325 | 1 |

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

1. Using fast or express hardeners (HS: 3307, 3309, or 3310; VHS: 3220) can speed up the dry time of the Permacron® MS Clear Coat 8180 significantly especially when Permasolid® Accelerator 9025 is also being 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.
2. Medium hardeners (HS: 3315; VHS: 3230) should be used when repairing bumpers and/or 2 to 3 exterior panels.
3. Slow hardeners (HS: 3320 or 3325; 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 |
| Dry through: | 12 hours |

LOW BAKE

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

INFRARED DRYING

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



PHYSICAL PROPERTIES

Coating Category: Clear Coating (HS Hardeners)

Max. VOC (AP): 503 g/l; 4.2 lbs/gal
 Max. VOC (LE): 503 g/l; 4.2 lbs/gal
 Avg. Gallon Weight: 993.1 g/l; 8.29 lbs/gal
 Avg. Weight % Volatiles: 51.1%
 Avg. Weight % Water: 0.0%
 Avg. Weight % Exempt Solvent: 0.0%
 Avg. Volume % Water: 0.0%
 Avg. Volume % Exempt Solvent: 0.0%

Theoretical Coverage: 689.6 sq. ft. @ 1 mil
 Theoretical Coverage @ Recommended Film Build: 276– 345 sq. ft.

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 HS Hardeners)

Max. VOC (AP): 467 g/l; 3.9 lbs/gal
 Max. VOC (LE): 467 g/l; 3.9 lbs/gal
 Avg. Gallon Weight: 1013.1 g/l; 8.45 lbs/gal
 Avg. Weight % Volatiles: 45.9%



Avg. Weight % Water: 0.0%
Avg. Weight % Exempt Solvent: 0.0%
Avg. Volume % Water: 0.0%
Avg. Volume % Exempt Solvent: 0.0%

Theoretical Coverage: 769.7 sq. ft. @ 1 mil
Theoretical Coverage @ Recommended Film Build: 308 - 385 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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