



Permahyd® Hi-TEC Basecoat 480



GENERAL

DESCRIPTION

Permahyd® Hi-TEC basecoat 480 is an innovative waterborne base coat that is fast, versatile, and simple to blend. Hi-TEC provides a one-visit application with coverage in 1.5 coats. It is not necessary to flash between coats of basecoat, so processing time is minimized. All Hi-TEC color formulas VOC at spray are less than 420 g/l(3.5 lb/gal). Hi-TEC is excellent for spot, panel, or overall repairs, delivering results to satisfy the most critical repair.

STORAGE

Store free of frost! Permahyd Hi-TEC products should be stored at temperatures between 42°F / 5°C and 95°F / 35°C. Storing product above or below this temperature range will negatively impact product quality. Optimum Storage for maximum shelf life should be at 68°F / 20°C. Shipping guidelines are between 32°F / 0°C and 122°F / 40°C for up to 5 days in transit.

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

COMPONENTS

Products	Packages	Shelf Life at 20°C
Permahyd Hi-TEC WT Mixing Colors	0.5-1 Liter	4 years
Permahyd Hi-TEC WT331, WT1500	0.5 Liter	2 years
Permahyd Hi-TEC WT Pearl	0.5 Liter	3 years
Permahyd Hi-TEC WT Metallic, WT394-WT399	0.5-1 Liter	2 years
Permahyd Hi-TEC WT385, WT387,	3.5 Liter	2 years
Permahyd Hi-TEC WT Additive 6050, 6052, 6053	3.5 Liter	2 years
Permahyd Hi-TEC 1050, 1051 Blend in Additive	3.5 Liter	2 years
Permahyd Hi-TEC 3080 Hardener Additive	0.5 Liter	2 years

- Shelf life is a guide and products may be used beyond suggested shelf life
- Mixed colors (no WT Additive) may be stored for 6 months in the proper container



MIXING

COMPONENTS

- Permahyd Hi-TEC Basecoat 480
- Permahyd Hi-TEC WT Additive 6050
- Permahyd Hi-TEC WT Additive 6052 – For temperatures above 80°F
- Permahyd Hi-TEC WT Additive 6053 – For relative humidity above 50%

MIX RATIO

Solid Colors	Volume
Permahyd Hi-TEC Base Coat 480	1
Permahyd Hi-TEC WT Additive 6050,6052,6053	10-20%

Metallic / Pearl Colors	Volume
Permahyd Hi-TEC Base Coat 480	1
Permahyd Hi-TEC WT Additive 6050,6052,6053	20-30%

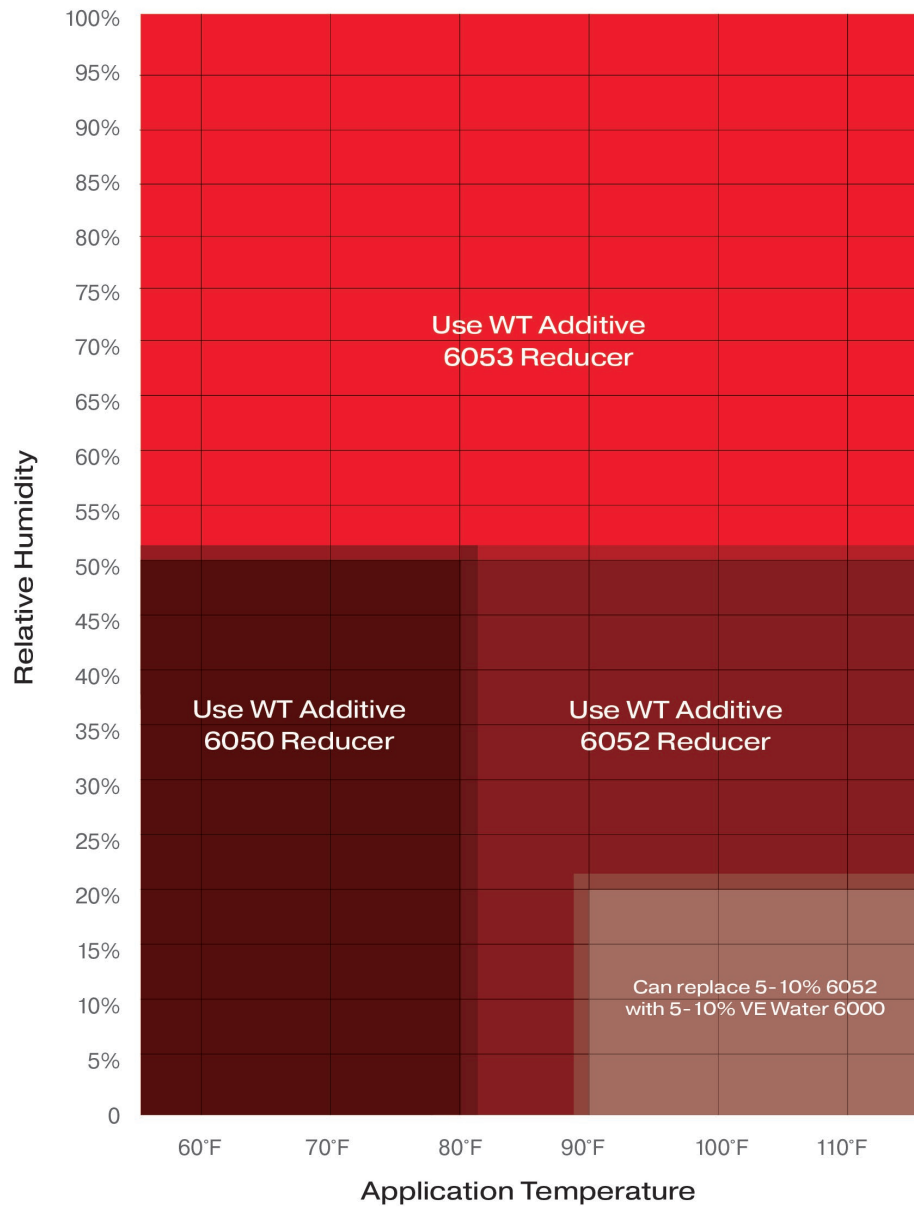
For three-stage and two-tone colors, add 5% Permahyd Hardener 3080 to the basecoat (Use in Ground Coat only). Do not use Permahyd Hardener 3080 with WT388 Black. Hardener reduces the pot life of



Permahyd Hi-TEC Base Coat 480 to 30-45 minutes depending on temperature.

For under hood colors, add 10% Permahyd Hardener 3080. Pot life for under hood color is 20 minutes. Refer to reducer chart for temperatures above 80°F. More reducer may be used in extreme conditions.

REDUCER SELECTION GUIDE



APPLICATION VISCOSITY

As mixed

POT LIFE

Permahyd Hi-TEC Basecoat in a ready to spray state should be used within seven days



APPLICATION

SUITABLE SUBSTRATES

Original or old paintwork (except reversible substrates)
 Permahyd Primer/Surfacers/Sealer
 Permasolid® Surfacers

SURFACE PREPARATION:

1. Degrease and sand.
2. Use P-600 or finer by hand to abrade any areas inaccessible by DA sander
3. Sand the surface with a DA sander and an interface pad with P-600.
4. Before further treatment, clean all substrates thoroughly with Axalta™ Silicone Remover 200 Slow, Axalta Silicone Remover 205A Spray, Axalta Silicone Remover 210 Water or Axalta Silicone Remover 220 Low VOC.

GUN SETUP

HVLP: 1.3 (1.4MM FOR HOT, DRY WEATHER)
 APPROVED TRANSFER EFFICIENCY 1.2 (1.3MM FOR HOT, DRY WEATHER)

PLEASE REFER TO GUN MANUFACTURER AND LOCAL LEGISLATION FOR PROPER SPRAY PRESSURE RECOMMENDATIONS.

APPLICATION

METALLIC COLORS

Working from the bottom up, apply 1 closed coat 6 to 10 inches from the surface to achieve 75% opacity, followed by 1/2 coat 10 to 14 inches from surface for metallic orientation. Keep overlap at 75% or more during entire process. If 75% opacity is not met after the first coat, allow a 30 second dwell time and apply a second coat. Follow with the prescribed 1/2 coat.

SOLID COLORS

Working from the bottom up, apply 1 closed coat 6 to 10 inches from the surface to achieve 75% opacity, followed by 1/2 coat 10 to 14 inches from surface to achieve opacity. Keep overlap at 75% or more during entire process. If 75% opacity is not met after the first coat, allow a 30 second dwell time and apply a second coat.

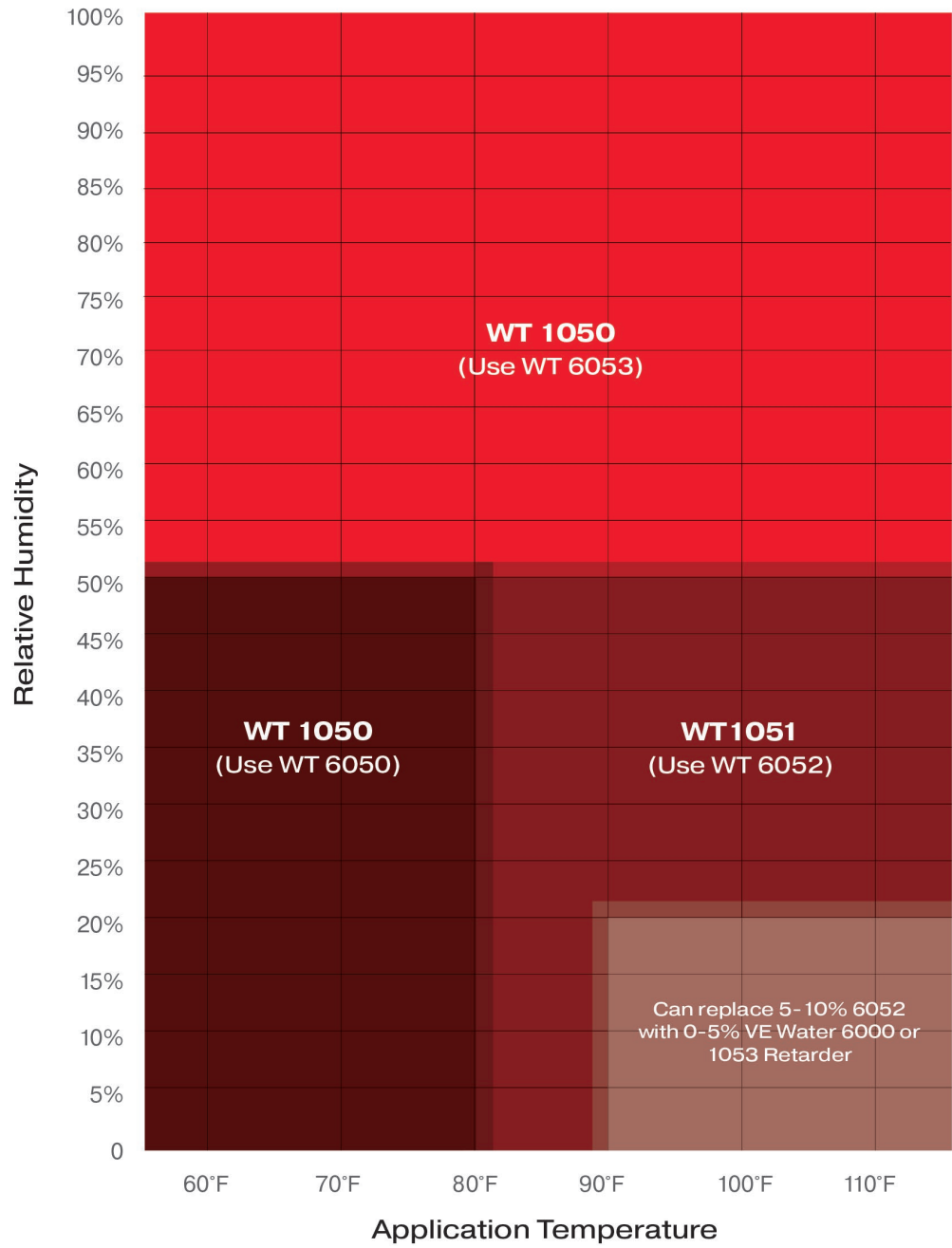
Flash-off and drying times depend on the temperature, humidity, air flow in the booth, and on the number of coats. The surface must, in all cases be allowed to matte completely.

Small areas: Surface matting can be accelerated by heat and additional air flow. Linear air acceleration using either fans or blowers pushing air across the surface will accelerate the drying process.

Large areas: Surface matting can be accelerated by using infrared, or force dry at 110° F for 15-20 minutes. Allow surface to cool prior to clearcoat application.



BLENDER ADDITIVE SELECTION GUIDE





BLENDING THE BASE COAT:

1. Apply 1 closed coat of 1050, or 1051 Blender @ 24-27 psi to the blend panel
2. Immediately apply color to the blend area first, using 3 control coats at 10-14 inches from the panel. Use 26-28 psi and a 75% overlap throughout the entire repair.
3. Use an outside-in approach. Extend the first coat furthest; then each subsequent coat should be inside the previous coat. A “motorcycle wrist” action helps fade the color.
4. A diagonal blend helps produce the most undetectable repair.
5. Apply color to the surfacer (repair) area with a 1 ½ coat application. (1 full coat at 6-10 inches, followed by an orientation coat at around 12-inch distance – higher humidity = further distance)
6. Keep a 75% or more overlap during the entire process.

THREE STAGE PEARL COLORS STANDARD APPLICATION:

1. Activate with 5% 3080 and apply Permahyd Hi-TEC Base Coat 480 (ground color) to completely cover the surfaced area, overlapping slightly onto the original finish.
5. Allow ground coat to flash-off (force drying is a best practice, allow substrates to cool to ambient temperature before proceeding).
2. Apply 1 ½ - 2 ½ coats of ready to spray Permahyd Hi-TEC Base Coat 480 (mid-coat color) slightly overlapping this area, staggering each coat, with no flash time, so that it matches the original finish.

BLENDING THREE STAGE COLORS:

1. In a separate cup, mix RTS (activated) ground coat with 1050/1051 RTS blending agent at a 1:1 ratio
2. Blend 1-2 coats of the 1:1 ground coat/blender mixture into outer blend zones, creating a fade. Do not allow to flash
3. Follow immediately with 1 ½ - to 2 ½ coats of full strength ground coat over repair area per standard application method.
4. Allow to flash. (Force drying is a best practice, allow substrates to cool to ambient temperature before proceeding)
5. Apply Mid-Coat with the same process as a metallic color
6. Allow to flash off to matte prior to clearcoat application

BLENDING SOLID PASTEL COLORS:

1. In a separate cup, mix RTS ground coat with RTS 1050/1051 blending agent in a separate cup at a 1:1 ratio
2. Blend 1-2 coats of the 1:1 ground coat/blender mixture into outer blend zones, creating a fade. Do not allow to flash
3. Follow immediately with 1 ½ - to 2 ½ coats of full strength ground coat over repair area per standard application method.
4. Allow to flash off to matt prior to clearcoat application

For information on spray equipment, please see Technical Data Sheet No. 905.1. Information on cleaning of equipment and waste management can be found in Technical Data Sheet Nos. 905.0 and 905.2 respectively



DRY TIMES

AIR DRYING

Dust free: 20 to 30 minutes at 68°F/ 20°C
 Utilization of air diffusors, to accelerate air across the surface, will shorten dry time.

FORCE DRYING

Low bake at 110°F for 15-20 minutes, allow to cool before applying clearcoat

INFRARED DRYING

IR medium wave: Approximately 4 minutes
 IR short wave approx.: Approximately 3 minutes
 Cool down time: Approximately 5 minutes

RECOAT: After flash off, within 24 hours

TOPCOAT: Activated or unactivated Permahyd Hi-TEC Baseocat must be clearcoated within 24 hours



PHYSICAL PROPERTIES

Coating Category: Color Coating (Solid w/ 20% WT Special Additive)

Max. VOC (AP): 69 g/l; 0.6 lbs/gal
 Max. VOC (LE): 236 g/l; 2.0 lbs/gal
 Avg. Gallon Weight: 1086 g/l; 9.0 lbs/gal
 Avg. Weight % Volatiles: 75.3%
 Avg. Weight % Water 68.7%
 Avg. Weight % Exempt Solvent: 0.9%
 Avg. Volume % Water: 74.0%
 Avg. Volume % Exempt Solvent: 1.2%

Coating Category: Color Coating (Effect w/ 30% WT Special Additive)

Max. VOC (AP): 132 g/l; 1.1 lbs/gal
 Max. VOC (LE): 416 g/l; 3.5 lbs/gal
 Avg. Gallon Weight: 1031 g/l; 8.6 lbs/gal
 Avg. Weight % Volatiles: 80.1%
 Avg. Weight % Water 70.1%
 Avg. Weight % Exempt Solvent: 1.2%
 Avg. Volume % Water: 72.1%
 Avg. Volume % Exempt Solvent: 1.5%

Coating Category: Color Coating (Multi- Stage 10% 3080/ 20% WT Additive)

Max. VOC (AP): 89 g/l; 0.7 lbs/gal
 Max. VOC (LE): 259 g/l; 2.2 lbs/gal
 Avg. Gallon Weight: 1086 g/l; 9.1 lbs/gal
 Avg. Weight % Volatiles: 71.6%
 Avg. Weight % Water: 63.7%
 Avg. Weight % Exempt Solvent: 1.1%
 Avg. Volume % Water: 68.3%
 Avg. Volume % Exempt Solvent: 1.1%

Coating Category: Color Coating (Multi- Stage 10% 3080/ 30% WT Additive)

Max. VOC (AP): 146 g/l; 1.2 lbs/gal
 Max. VOC (LE): 397 g/l; 3.3 lbs/gal
 Avg. Gallon Weight: 1083 g/l; 8.6 lbs/gal
 Avg. Weight % Volatiles: 76.3%
 Avg. Weight % Water: 64.9%
 Avg. Weight % Exempt Solvent: 1.1%
 Avg. Volume % Water: 67.0%
 Avg. Volume % Exempt Solvent: 1.1%



Coating Category: Uniform Finish Coating (Effect Blending 30% WT Additive)

Max. VOC (AP): 360 g/l; 3.0 lbs/gal
 Max. VOC (LE): 493 g/l; 4.1 lbs/gal
 Avg. Gallon Weight: 1036.8 g/l; 8.6 lbs/gal
 Avg. Weight % Volatiles: 61.4%
 Avg. Weight % Water: 26.3%
 Avg. Weight % Exempt Solvent: 0.3%
 Avg. Volume % Water: 26.6%
 Avg. Volume % Exempt Solvent: 0.4%

Theoretical Coverage:

	Rec. Film Build	Coverage at Recommended Film Build
Solids	1.0-1.5 mils	300-500 square feet per gallon
Pearls	0.5 – 0.8 mil	400-600 square feet per gallon
Metallics	0.4-0.6 mil	450-650 square feet per gallon

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 SDS 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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Revised: June 2022

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