



Spies Hecker® Permahyd® Hi-TEC Effect Control 6054



GENERAL

DESCRIPTION

Effect Control Additive to assist with a transparent flake effect appearance and high travel effect colors.

Examples:

Mazda 46G, 46V, 51K, Lexus 1L3

Special repair procedures, techniques and mixing colors are used during the repair process.

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 Additive 6050	3.5 Liter	2 years
Permahyd® Hi-TEC WT Additive 6052	3.5 Liter	2 years
Permahyd® Hi-TEC WT Additive 6053	3.5 Liter	2 years
Permahyd® Hi-TEC 1050 Blend in Additive	3.5 Liter	2 years
Permahyd® Hi-TEC 1051 Special Blend in Additive	3.5 Liter	2 years
Permahyd® Hi-TEC 6054 Effect Control	1.0 Liter	2 years
Permahyd® Hi-TEC 3080 Hardener	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

MIX RATIO

Ground Coat	Volume
Solid	1
Permahyd® Hi-TEC 3080 Hardener	5%
Permahyd® Hi-TEC WT Additive 6050,6052,6053	10-20%

Ground Coat	Volume
Effect / Metallic	1
Permahyd® Hi-TEC 3080 Hardener	5%
Permahyd® Hi-TEC WT Additive 6050,6052,6053	20-30%

Metallic / Pearl Colors	Volume
Midcoat	1
Permahyd® Hi-TEC 6054 Effect Control	3

APPLICATION VISCOSITY

As mixed



SPECIAL TIPS

Preparation and application procedure

- Adjacent blend panels may be required for proper blend transition.
- Do not use Activator in the ground coat colors containing WT388



APPLICATION

SUITABLE SUBSTRATES

Original or old paintwork (except reversible substrates)
 Priomat® 1K Primer Surfacer 4085
 Permacron® Primer/Surfacers
 Permahyd® Primer/Surfacers
 Permasolid® Surfacers
 Permahyd 1K Surfacer and Sealer

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.

SPRAY GUN SETUP

HVLP:	1.2mm*
Approved Transfer Efficiency	1.2mm*

*Restrict the fluid flow with the material adjustment knob by approximately 1 1/2 – 2 1/2 turns from fully closed. Alternatively, a 1.1mm fluid tip may be used. In drier conditions, (<30% relative humidity) more fluid delivery may be required. Verify spray pattern prior to application.

AIR PRESSURE

HVLP	10 psi at the air cap
Approved Transfer Efficiency	27-29 psi for high pressure spray guns
	18-20 psi for low pressure spray guns

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

GROUND COAT PROCESS:

1. Apply color to the repair area using the normal 1.5 coat allocation. Apply one full coat at 6-10 inches from the panel, followed by an orientation coat 10 to 14 inches from the panel. Keep a 75% or more overlap during the entire process. Allow proper flash and dry time.
2. Blending: Apply one coat of of Permahyd® Hi-TEC 1050 Blend in Additive or Permahyd® Hi-TEC 1051 Special Blend in Additive – Low Humidity in the blend areas using a thin closed coat. Do not allow to flash, follow immediately with the ground coat.
3. Blend the ground coat into the blend areas first, using 3 control coats at 10 to 14 inches from the panel using 26-29 psi and a minimum 75% overlap throughout the entire repair. Use an outside - in approach or reverse blend. Extend the first coat the farthest. Each subsequent coat should be inside the previous coat. A “motorcycle wrist” action helps to fade the color. After the blend area has been completed,

MIDCOAT:

1. Apply the midcoat in 3 to 5 non-wetted uniform mist coats. Use an outside - in approach or reverse blend approach.
2. Allow each coat to flash 3 to 4 minutes. No blender is required for the mid coat application.



TIPS FOR SUCCESS:

- Prepare a let down panel to establish the correct number of coats for the midcoat.
- Do not over apply the mid coat. Any wetted areas will result in uneven flake appearance..
- Complete flash between midcoats is critical.

STEP FOUR:

- After allowing to dry completely, approximately 20 - 30 minutes, Permacron® 2K or Permasolid® HS Clear Coats may be applied.



DRY TIMES

AIR DRYING

Dust free: 20 to 30 minutes at 68°F/ 20°C

FORCE DRYING

10 minutes at 140°F / 60°C metal temperature. Allow to cool 10-15 minutes.

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 un-activated Permahyd® Hi-TEC must be clear coated within 24 hours



PHYSICAL PROPERTIES

Theoretical Coverage:

Ground Coat	Rec. Film Build	Coverage at Recommended Film Build
Solids	1.0-1.5 mil	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
Midcoat:		
Effects	0.1 - 0.2 mil	400 – 800 square feet per gallon

Color Coating (Multi-stage 300% WB2060 Effect Adjuster)

Max. VOC (LE):	358 g/l	3.0 lb/gal
Max. VOC (AP):	51 g/l	0.4 lb/gal
Avg. Gal. Wt.:	1010 g/l	8.4 lb/gal
Avg. Wt.% Volatiles:	90.0 %	
Avg. Wt.% Exempt Solvent:	0.2 %	
Avg. Wt.% Water:	84.7 %	



Avg. Vol.% Exempt Solvent: 0.3 %

Avg. Vol.% Water: 85.5 %

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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