

TECHNICAL DATASHEET



October 2023

RLD490V_ENVHP_OVM

ENVIROBASE[®] HP OneVisit[™] Modifier

Envirobase Waterborne Basecoat Colour T4xx

OneVisit[™] Modifier ST T4900

OneVisit[™] Modifier HD T4910

Blending Adjuster T4904

Envirobase Thinners T494 / T495

Activator D8260

PRODUCTS

Envirobase High Performance is waterborne basecoat mixing scheme that significantly reduces solvent emissions into the environment and complies with all current and future legislative requirements. *Envirobase High Performance* color reproduces original solid, metallic, mica or special effect paint finishes, giving excellent covering power and fade out capability.

The new *OneVisit* Modifier T4900 and T4910 allows for One Visit in the spray booth, when applying *Envirobase HP* basecoat.

The process is simple. Apply the first full coat of basecoat to opacity, followed by final control coat into the wet film to achieve a uniform final finish.

T4904 Blending Adjuster is a new developed product to be used for blending process applied as a wet full coat in the blend area.



PREPARATION OF SUBSTRATE

Degrease all surfaces to be painted with appropriate PPG waterborne substrate cleaner before dry sanding with P400-500 grade paper followed by Excenter foam disc grit P800



Wash off residues and dry thoroughly before re-cleaning with appropriate waterborne PPG pre-cleaner see - Technical Data Sheet Deltron Cleaners RLD63V.

The use of a tack-rag is recommended.

Apply over original sanded and clean 2K finishes, or a range of PPG primers - refer to primer TDS for specific recommendations. The use of GreyMatic primers is recommended for optimum results.

Note: Do not apply over 1K or 2K Wash Etch Primers.

Wash off residues and dry thoroughly before re-cleaning with appropriate waterborne pre-cleaner see - Technical Data Sheet.

PRE-APPLICATION

Hand-shake bottles of *Envirobase* HP tinter and T4900/T4910 for a few seconds before use. Do not shake vigorously.

Mixed *Envirobase* RFU colour should be thoroughly hand-stirred before application. If not used immediately it should be hand-stirred again before use.

Use nylon paint filters specially designed for use with waterborne paint materials.

A 125 micron mesh is recommended.

MIXING RATIOS

Mixing Ratios with *Envirobase* HP *OneVisit* Modifier (2CT colors).

Volume / Parts	Metallic Colors	High Chroma. Red, Green and Blue Mica Colors	Solid Colors and White Mica/Metallic (*)
<i>Envirobase</i> HP	100	100	100
T4900 / T4910	20	15	5
T494 / T495			15

(*) Colors with high T400 content. (+50%)

Mixing Ratios with *Envirobase HP OneVisit* Modifier (3CT colors).

Step	Volume / Parts	Metallic Colors	Solid Colors
Step 1	<i>Envirobase HP</i>	100	100
	T4900 / T4910	20	5
	T494 / T495		15
Step 2	T490 + Mica / Solid	100	100
	T494 / T495	20	20

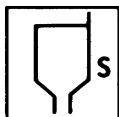
Optional Mix Ratios using hardener/D8260 in RFU: (2CT and 3CT)

Metallic Colors: 100:20:5:5 (ENVHP+T4900/T4910+T494/T495+D8260)

Solid Colors: 100:10:15:5 (ENVHP+ T4900/T4910+T494/T495+D8260)

Mixing Ratios with Blending Adjuster

	Volume / Parts
T4904 Blending Adjuster	100
T4900 / T4910	20



Viscosity will vary pending the color/toner combinations and mix ratio.
 (If needed viscosity can be adjusted accordingly using T494 or T495)
 Potlife RFU: 1 month. Stir well before use.

ENVIROBASE HP OneVisit Modifier. SET UP & PROCESSES



Standard Spray gun set-up:

Conventional/RP STD Temp: 1,2mm
 Conventional/RP High Temp: 1,3mm

HVLP STD Temp: 1,3mm
 HVLP High Temp: 1,4mm

Inlet pressure and needle settings application:

Full Panel:

1.8 bar inlet pressure (Full coat and Control coat)
 Full Trigger (Full wet uniform coat) followed by 1¼-1½ turn out (Control coat)
 1¼-1½ turn out (Control coat) with SATA spraygun
 2 turn out (Control coat) with Anest Iwata spraygun

Blend In Process/area:

1.5-1.8 bar inlet pressure
 Trigger 1¼ turn out through the blend process –
 1¼ turn out (Control coat)

Use reverse technique (spray the adjacent fade-out area first and then the actual repair area afterwards).

****See Blend Process Best Practice Section***

Flash off Process:

There is several ways/equipment to be used for the flash off process.

- Raise temperature to 40°C – 50°C till matt
or
- Leave it to flash in ambient spray booth temperature and air flow.

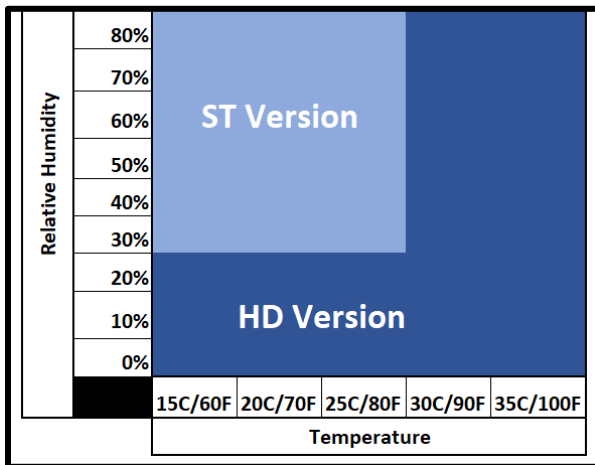
Flash off process using blowers:

- Raise temperature to 40°C – 50°C till matt
- Leave it to flash in ambient spray booth temperature and air flow.
- Air assisted low flow blowers mounted in booth in combination with 40°C – 50°C till matt.
- Air assisted low flow blowers mounted in booth at ambient spray booth temperature.

*NOTE: For all processes using hand or standing blowers, maintain a distance of 1 metre from the panel with a maximum inlet pressure of 2 bar. In case of higher inlet pressure, allow a flash-off time of 5-10 minutes before using the Blowers.

Total dry film build: 10 - 20 µm

Temperature and Humidity Recommendation Chart:



Thinner selection Below 30-35°C T494 Above 30-35°C T495

BLEND IN TECHNIQUE

When performing a blend process, a Blending Adjuster is needed for most “Critical Colors” like – Silver Metallic and Light Metallic colors.

Application process 2CT:

1. Prepare T4904 Blending Adjuster RFU in a separate spray gun or any dispenser system.
2. Apply the Blending Adjuster on adjacent panel or only in the area to be blended. The Blending Adjuster need to be applied as a wet uniform layer to enable the pigments/RFU color to get the correct lay-down and metallic orientation.
3. Apply 1 coat one thin coat of RFU color in the repair area, followed by reverse blend in process to opacity. Avoid heavy layers. Try to stay away from the panel/car part-edge when applying the blender in the component. A good fade-out of the blender will optimise the result. Blend the fading-out area as smooth as possible using reverse technique.
4. End the process with a light control coat in the blend area.
5. Apply hereafter full panel application process with RFU color on new/repaired panel.

Application process 3CT:

1. Only needed for light metallic colors in step 1: Apply the T4904 Blending Adjuster RFU in the area to be blended. The Blending Adjuster need to be applied as a wet layer to enable the pigments/RFU color to get the correct lay-down and metallic orientation.

2. 3CT STEP 1:

3. Apply 1 coat one thin coat of Step 1 RFU color in the repair area, followed by reverse blend in process to opacity. Avoid heavy layers. Blend the fading-out area as smooth as possible using reverse technique.

NOTE Step 1 RFU Color has to be focused as limited as possible into the adjacent panel

4. End Step 1 RFU color process with a light control coat in the blend area. (If the blend looks smooth, control coat is not needed.)

5. 3CT Step 2:

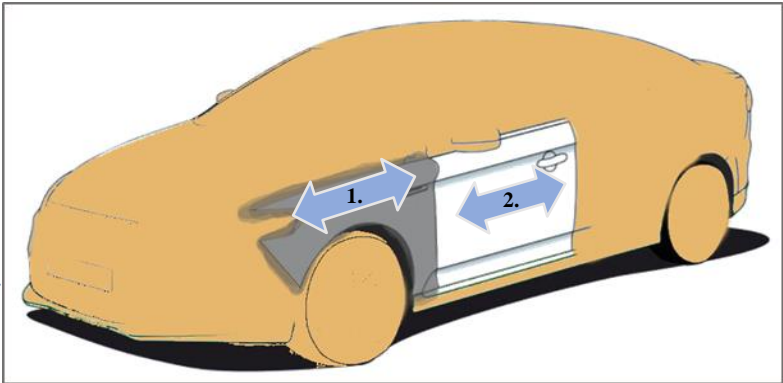
6. Apply the T4904 Blending Adjuster RFU on the adjacent panel or only in the area to be blended. The Blending Adjuster has to be applied as a wet layer to enable the pigments/RFU color to get the correct lay-down and metallic orientation.

7. Apply 1 coat one thin coat of Step 2 RFU color in the repair area extending blend area over step 1, here after followed by reverse blend in process to correct appearance. Avoid heavy layers. Blend the fading-out area as smooth as possible using reverse technique.

8. End the process with a light control coat in the blend area.

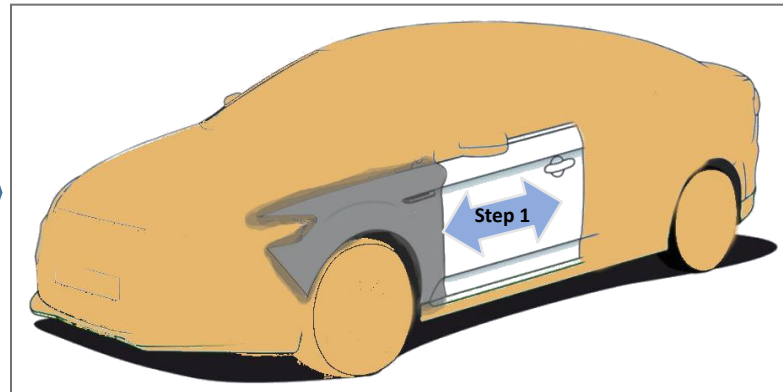
9. Apply hereafter full panel application process on new/repared panel.

1. Repaired or new panel
2. Adjacent panel

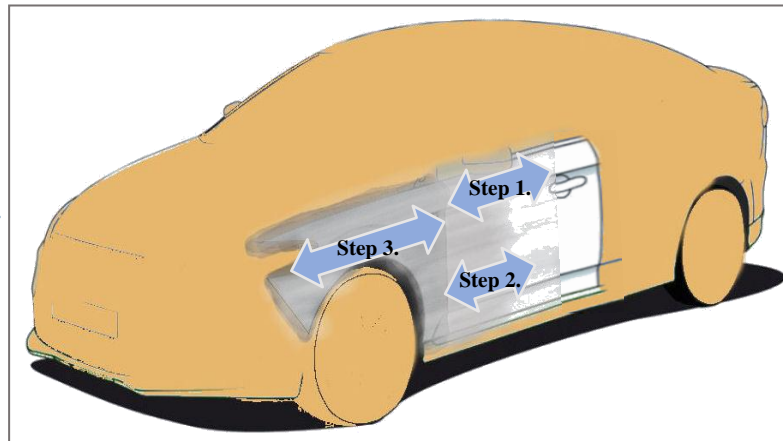


- 1:**
Blending Adjuster
 Step 1. Apply the blend bed adjuster as a wet coat on the adjacent panel or in only in blend/fade-out area.

(The Blending Adjuster will allow the correct pigment lay down in the blend area)



- 2:**
WBBC Color RFU
 Step 1. Apply a light coat into the Blending area.
 Step 2. Apply STD blend process into the Blending Area. Blend/fading-out as smooth as possible. End the blend process with a light control coat on blend area.
 Step 3. Apply WBBC color on repaired panel to opacity.



REPAIR AND RECOATING



Overcoating:

Envirobase HP OneVisit Modifier ready for use mix can be overcoated with a PPG clearcoat after flash off till mat.



De-nib:

It is possible to de-nib *Envirobase HP OneVisit* Modifier, after flash off, with fine sanding paper – P1000-1500 (dry paper) using air blowing and a tack rag to remove sanding dust and followed by a spot repair (see FADING-OUT section) prior to the clearcoat application.

EQUIPMENT CLEANING

- Clean all mixing equipment immediately after use, preferably using a dedicated waterborne equipment cleaning machine.
- Use tap water, with a final rinse using deionized water or an alcohol-based cleaner such as D846.
- Ensure all equipment is completely dry before storage or use.

STORAGE & HANDLING



ENVHP tinters, mixed colour & *OneVisit* Modifier should be stored in a cool, dry place away from sources of heat. During storage and transportation temperatures must be maintained at a minimum of +5°C and a maximum of +35°C. Avoid exposure to frost or freezing conditions.

Shelf life: 2 years (Unopened T4900/T4910) RFU Mix: 1 Month.

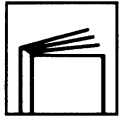


ENVHP should be mixed in clean, dry containers and equipment. Do not use mixing vessels or spray equipment that contains solvent residues. Mixing vessels should ideally be plastic - if metallic they should have an internal anti-corrosion coating.

VOC INFORMATION

The EU limit value for this product (product category: IIB.d) in ready to use form is max. 420g/litre of VOC. The VOC content of this product in ready to use form is max. 420g/litre. Depending on the chosen mode of use, the actual ready to use VOC of this product may be lower than that specified by the EU Directive code.

WASTE HANDLING & DISPOSAL / HEALTH & SAFETY



These products are for professional use only, and are not to be used for purposes other than those specified. The information on this TDS is based on present scientific and technical knowledge, and it is the responsibility of the user to take all necessary steps in order to ensure the suitability of the product for the intended purpose. For Health and Safety information please refer to the material Safety Data Sheet, also available at: www.ppgrefinish.com

Store waterborne & solventborne wastes separately. All wastes must be handled by a competent agent with appropriate certification. Waste **must** not be disposed of into drains or watercourses.

For Further Information Please Contact

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