



This product and bulletin is scheduled to be discontinued. Please refer to the updated EU-143 EnviroBase High Performance for information on Envirobase HP.

Product Information

Envirobase Color (California 4.5 VOC)

Product Description

Envirobase is waterborne basecoat color for use in the repair and repainting of motor vehicles. Applied as a part of a two-stage basecoat/clearcoat paint system, mixed Envirobase color reproduces the original solid, metallic or mica paint finish of a vehicle.

Envirobase contains considerably less volatile organic compounds (VOC) than conventional solvent borne basecoat. This makes Envirobase particularly suitable for use in areas where VOC emissions or product VOC content are subject to legal restrictions.

Preparation of Substrate



Apply over original baked finishes or over recommended Global undercoats.



In all cases, wash all surfaces to be painted with soap and water, then apply the appropriate Global cleaner. See EU-134 Global Cleaners bulletin for selection and usage instructions. Ensure that the substrate is thoroughly cleaned and dried both before and after application work.



Apply Envirobase after sanding with European P800 – 1200 / U.S. 500 – 600 grade paper or dry sand with European P600 – 800 / U.S. 400 – 500 grade paper.

Wash off residues and dry thoroughly before recleaning with appropriate Global substrate cleaner. The use of a tack rag is recommended.

Before Mixing, gently hand-shake bottles of Envirobase tinters for a few seconds before use.

Do not place toners or mixed color on shaker or mechanically agitate.

Mixed Envirobase color should be thoroughly hand-shaken before application. If not used immediately it should be hand-shaken again before use.

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

APPLICATION GUIDE

Mix Ratio:



Envirobase **10 Vols**
T494 Thinner **1 to 3 Vols or 10 – 30% (Most will be 10 – 20%)**

Note: If 10% reduction is used, it is important to respect minimum drying times between coats and before clear application.

Pot Life:



None

Hand-shake well, before using.

Additives:



T588 Modifier

Pre-reduce the Envirobase with at least 20% T494 Thinner, then add 10% T588, mix well and add up to 20% more T494 is desired.

By adding the modifier to *Envirobase*, the product can be used under the hood and in areas where color match and durability is needed but gloss is not required. Exterior areas with prolonged exposure to the sun must be clearcoated.

Spraygun set-up:



Fluid Tip

1.0 – 1.3 mm

Spray Viscosity

20 – 24 secs, with a #2 Zahn cup

Spray pressure:

HVLP at air cap

10 PSI / 0.7 bar

Conventional at spray gun

45 - 55 PSI / 3 – 4 bar

Number of coats:



Small - Spot Repairs

3 - 4 light coats, **plus...**

Large - Multiple Panels / Overall

3 - 4 med. light coats, **plus...**

... If necessary, an optional control coat for metallic colors.

Recommended film build per wet coat

.80 – 1.0 mil

Recommended dried film build per coat

.10 – .20 mil

Flash off at 20°C / 68°F:



Small - Spot Repairs

Use a handheld or freestanding air blower

Large - Multiple Panels / Overall

Use a freestanding air blower

Do not use the spraygun as an air blower

Between coats:

1 – 2 minutes or until dried to a matte finish

Note: *Booth needs to turn 90 FPM, in addition to the blowers, to achieve flash in 1 – 2 minutes.*

Temperature, humidity, air movement and film build affect dry times. The best results are achieved with increased Temperature and/or Air Movement and Lower Humidity and/or Film Build.

Drying times:



Dust-free

20°C / 68°F

Each coat approximately 2 – 4 minutes

Dry to Handle

20°C / 68°F

Approximately 15 – 20 minutes



Dry to De-Nib

20°C / 68°F

Approximately 15 – 20 minutes

Tape Time

20°C / 68°F

5 minutes



Dry to Clear

20°C / 68°F

15 minutes minimum

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Overcoat / Recoat:



Overcoat with any compatible Global clear

Flash off until the entire surface is touch-dry and has a uniform matte appearance, or for 15 minutes*, whichever is longest. 15 minutes is the minimum flash-off period between the final coat of Envirobase and application of clear.



Dry Sand

Use European P1500 / U.S. 800 grit

Recoat

15 minute minimum

48 hours maximum, after 48 hours 1 coat must be applied prior to clearcoat application.

** Temperature, humidity, air movement and film build affect dry times. The best results are achieved with increased Temperature/ or Air Movement and Lower Humidity and/ or Film Build.*

Performance Guidelines:

Dirt nibs or other defects in the Envirobase paint film may be repaired as follows:

1. Allow the surface to completely flash-off
 2. Dry sand the defect with P1500 / U.S. 800 grade paper or finer or with a fine abrasive pad.
 3. Remove sanding dust from the surface by strong air blowing with a clean air supply.
 4. Clean the surface with suitable tack-rag.
 5. Re-coat the surface with Envirobase as normal.
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Compatibility

Suitable Clears

D893 Low VOC Performance Clear
D894 High Solids Clear
D8101 Fast Clear
D8102 Pre-Flexed Matte Clear
D8126 Ceramiclear
D8150 Performance Clearcoat

Compatible Primers & Surfacer

Envirobase may be applied over:

D820 Plastic Adhesion Promoter***	D8080 UV Cured Primer Surfacer**
D822 Corrosion Resistant Primer Sealer	D8099 Anti-Corrosion Etch Primer***
D825 2K Tintable Primer Surfacer Base	SXA1031 Aerosol Etch* (cut throughs only)
D831 Chromate Free Wash Primer ***	SX1050 Plastic Adhesion Primer***
D839 2K Primer/Surfacer Sealer	SX1057 Flexible 2K Surfacer
D891 Sealer	SX1060 Rollable 2K Primer Surfacer
D800X 2K AChromatic Surfacer	One Choice Plastic Prep System***
D808X 2K Chromatic Sealer	(SU4902,SU4903,SUA4903)

Envirobase should not be applied directly over:

D820 Plastic Adhesion Promoter***
D831 Chromate Free Wash Primer***
SXA1050 Plastic Adhesion Primer***
One Choice Plastic Prep System (SU4902,SU4903,SUA4903)***

* Overcoat with any 2K surfacer or sealer before Envirobase.

** As a primer surfacer only, not as a sealer.

*** For optimum performance a 2K sealer may be used.

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Technical Data:

Total dry film build

Minimum	.10 mils / 2.5µm
Maximum	1.20 mils / 30µm
Recommended film build per wet coat	.80 – 1.0 mils
Recommended dried film build per coat	.10 – .20 mils

Theoretical coverage

Theoretical coverage in sq.ft./US gal. Ready-to-spray (RTS), giving 1 mil (25 µm) dry film thickness.

Percent solids by volume RTS

8.5 – 20.0%

VOC

Package VOC Actual	0.61 – 0.90 lbs/gal (73 – 108 g/l)
Package VOC Regulatory (Less Water Less Exempts)	2.34 – 3.33 lbs/gal (280 – 399 g/l)
10:1 RTS VOC Regulatory (Less Water Less Exempts)	2.42 – 3.40 lbs/gal (290 – 407 g/l)
10:3 RTS VOC Regulatory (Less Water Less Exempts)	2.48 – 3.50 lbs/gal (297 – 419 g/l)
With T588 Modifier & T494 Thinner:	
10:2:1 RTS VOC Regulatory (Less Water Less Exempts)	2.50 – 3.50 lbs/gal (300 – 419 g/l)
10:2:1:2 RTS VOC Regulatory (Less Water Less Exempts)	2.54 – 3.50 lbs/gal (304 – 419 g/l)

System VOC content:

Envirobase with D890 Compliant Clear	below 3.4 lb./gal
Envirobase with D893 Low VOC Performance Clear	below 3.9 lb./gal
Envirobase with D894 High Solids Clear	below 3.9 lb./gal
Envirobase with D8101 Fast Clear	below 3.9 lb./gal
Envirobase with D8102 Pre-Flexed Matte Clear	Maximum 4.5 lb./gal

Health and Safety:



See Material Safety Data Sheet and Labels for additional safety information and handling instructions.

- The contents of this package may have to be blended with other components before the product can be used. Before opening the packages, be sure you understand the warning messages on the labels and MSDS's of all the components, since the mixture will have the hazards of all its parts.
- Improper handling and use, for example, poor spray technique, inadequate engineering controls and/or lack of proper Personal Protective Equipment (PPE), may result in hazardous conditions or injury.
- Follow spray equipment manufacturer's instructions to prevent personal injury or fire.
- Provide adequate ventilation for health and fire hazard control.
- Follow company policy, product MSDS and respirator manufacturer's recommendations for selection and proper use of respiratory protection. Be sure employees are adequately trained on the safe use of respirators per company and regulatory requirements.
- Wear appropriate PPE such as eye and skin protection. In the event of injury, see first aid procedures on MSDS.
- Always observe all applicable precautions and follow good safety and hygiene practices.

Equipment Cleaning:



- Clean all mixing equipment immediately after use, preferably using a dedicated waterborne equipment cleaning machine.
- Use D842 Low VOC Cleaner or SX1005 0.4 VOC Cleaner for the initial cleaning step, with a final rinse using thinner.
- Ensure all equipment is completely dry before storage or use.

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Storage & Handling of Envirobase:

- Envirobase tinters, Envirobase mixed color & T494 Thinner should be stored in a cool, dry place away from sources of heat. During storage and transportation, temperature must be maintained at a minimum of +5°C or 41°F and a maximum of 60°C or 120°F. Avoid exposure to frost or freezing conditions.
- Envirobase 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 metal the container should be stainless steel or have an internal anticorrosion coating.
- Store waterborne & solvent borne wastes separately. A competent agent with appropriate certification must handle all waterborne wastes. Waste must be disposed of in accordance with all Federal, State, Provincial, and local laws and regulations.
- The Envirobase waterborne paint residues should be segregated from all other wastes and kept in a separate closed lined container. The Envirobase waterborne paint residues must be disposed of in accordance with all federal, state, provincial and local laws and regulations

EMERGENCY MEDICAL OR SPILL CONTROL INFORMATION (412) 434-4515; IN CANADA (514) 645-1320

Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the general public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to PPG Industries. Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results, or fitness for any intended use, nor does PPG Industries warrant freedom from patent infringement in the use of any formula or process set forth herein.

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