



ENVIROBASE

Product Information

Envirobase Color

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 GLG-142 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-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.

APPLICATION GUIDE

Mixing Ratio:



Envirobase : **T494 De-Ionized Water**
10 Vols or 100% : up to 3 Vols or 0 – 30% (Most will be 10 - 20%)

Potlife:



None

Hand stir well, before using.

Additives:

None

Spraygun set-up:



Fluid Tip
Spray Viscosity

1.0 – 1.3 mm
20 – 24 secs, with a #2 Zahn cup

Spray pressure:



HVLP at air cap
Conventional at spray gun

0.7 bar / 10 PSI
3 – 4 bar / 45 - 55 PSI

Number of coats:



Small - Spot Repairs
Large - Multiple Panels / Overall
Film build per wet coat
Dried film build per coat

3 - 4 light coats, **plus...** ... **If necessary, an optional control coat for metallic colors.**
3 - 4 med. light coats, **plus...**
.80 – 1.0 mil
.10 – .20 mil

Flash off at 20°C / 68°F:



Small - Spot Repairs
Large - Multiple Panels / Overall

Use a handheld or freestanding air blower
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

APPLICATION GUIDE

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.



Dry Sand

15 minutes is the minimum flash-off period between the final coat of Envirobase and application of clear.



Recoat

Use European P1500 / U.S. 800 grit

15 minute minimum 7 days maximum, after 7 days Envirobase must be sanded.

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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.

Technical Data:

Total dry film build

Minimum 2.5µm / .10 mils

Maximum 30µm / 1.2 mils

Recommended film build per wet coat 80µm / 1 mils

Recommended dried film build per coat 10µm / .20 mils

Theoretical coverage 642.2 sq. ft. per US gal.

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

Percent solids by volume RTS 8.5 – 20.0%

VOC

Product VOC content: Envirobase below 3.3 lb./gal

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

* System VOC below 3.5 lb./gal according to local VOC calculation method. A clear "VOC compliant" mix ratio option may need to be used in certain cases. Please refer to individual clear product data sheet for details.

Compatibility

Suitable Clears D890 Compliant Clear D894 High Solids Clear D8101 Fast Clear
D893 Low VOC Performance Clear D8102 Pre-Flexed Matte Clear

Compatible Primers & Surfacer

Envirobase may be applied over:

D820 Plastic Adhesion Promoter

D822 CRP Primer

D825 2K Tintable Surfacer

D839 2K Primer Surfacer / Sealer

D831 Chromate Free Wash Primer*

D891 Sealer 891

D8002 Ultra High Solids Surfacer

D8006 UHS Sealer

D804x Uni-Prime® DTM**

D807x 2K Chromatic Sealer

D8080 UV Primer***

* 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

Envirobase **should not** be applied directly over:

D831 Chromate Free Wash Primer

D848 WB 2K Primer Surfacer

D859 Low VOC Sealer

D860 Low VOC Primer Surfacer

APPLICATION GUIDE

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 for the initial cleaning step, with a final rinse using De-ionized water.
- Ensure all equipment is completely dry before storage or use.

Storage & Handling of Envirobase:

- Envirobase tinters, Envirobase mixed color & T494 De-Ionized Water 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

Global at a Glance

Envirobase Color

Mix:



Envirobase : T494 De-ionized water
 10 Vols or 100% : up to 3 Vols or 0 – 30% (Most will be 10 – 20%)

Additives:



None

Pot life:



None

Air Pressure:



HVLP: 0.7 bar / 10 PSI at the air cap
 Conventional: 3 – 4 bar / 45 – 55 PSI
 Fluid tip: 1.0 – 1.3 mm or equivalent

Application:



Small - Spot Repairs 3 - 4 light coats, plus... If necessary, an optional control
 Large - Multiple Panels / Overall 3 - 4 med. light coats, plus... coat for metallic colors.
 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.

Recommended film build

Per wet coat .80 – 1.0 mil
 Dried film build per coat .10 – .20 mil

Dry times:



Dust-free 20°C / 68°F 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

Overcoat with: See compatibles listed earlier in Bulletin



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.



Recoat 15 minute minimum 7 days maximum, after 7 days Envirobase must be sanded.

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Emergency Medical or Spill Control Information (304) 843-1300; 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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