Product Information

Envirobase Color (California 3.5 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.
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Mix Ratio:

- Envirobe 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

Additives:

- T588 Modifier
Pre-reduce the Envirobe 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 Envirobe, 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

Note: 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.

Compatibility

Suitable Clears
D890 Compliant Clear
D893 Low VOC Performance Clear
D8102 Pre-Flexed Matte Clear
D8121 Premium LV Clearcoat 2.1 VOC
D8126 Cerami Clear

Compatible Primers & Surfacers
Envirobase may be applied over:
D820 Plastic Adhesion Promoter***
D831 Chromate Free Wash Primer***
D8080 UV Cured Primer Surfacer**
DLV800X 2K AChromatic Surfacer LV
DLV808X 2K Chromatic Sealer LV

SXA1031 Aerosol Etch (cut throughs only)*
SXA1050 Plastic Adhesion Primer***
SXA1080 2K Rollable Surfacer LV
One Choice Plastic Prep System
(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.

Per cent 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)
- 10:3 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 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.
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

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