

Technical Bulletin

VM4350 Tinted Mid-Coat Application Process

TBRR-4

PRODUCT DESCRIPTION

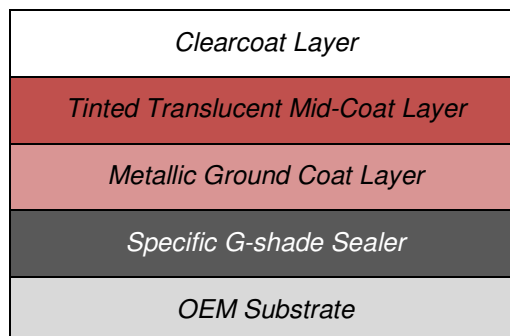
Certain newer model cars colors utilize VM4350 Vivid Ruby tinter in a clearcoat mid-coat layer to produce a very clean candy apple red effect. Ford code RR / Ruby Red is but one example of this.

NOTE: The example contained on the following pages is of Ford RR / Ruby Red. Other OEM color repairs using VM4350 will be similar.

The repair process utilizes a tinted mid-coat layer that is applied over AQUABASE® Plus, DELTRON® DBC, ENVIROBASE® High Performance, GLOBAL REFINISH SYSTEM® BC and NEXA AUTOCOLOR® 2K® basecoat systems. The tinted translucent mid-coat layer is made by combining VM4350 Vivid Ruby Tinter with many of PPG's popular express, production or glamour clearcoats.



This refinish repair consists of a tri-coat process made up of a red metallic ground coat layer, a tinted translucent mid-coat layer followed by a final clearcoat layer. See illustration below.



Brand specific formulas for the ground coat and the tinted mid-coat layer are available in PPG's PAINTMANAGER® software or by calling PPG at 800-647-6050 and follow the prompts to the Color Library.

SELECTING THE PROPER PAINT SYSTEM FROM PAINTMANAGER® SOFTWARE

- Searching Ford code RR in *PAINTMANAGER* program software will enter the user into their primary paint system. Choose one of these Tri-coat systems below for optimum color match. Note; Ford code RR formulas are also available from On-Line Color.
 - *Aquabase Plus BC 3CT 2.1* (uses low VOC clearcoats)
 - *Aquabase Plus BC 3CT NR* (uses National Rule - 4.2 VOC clearcoats)
 - *Deltron 2000 DBC TRICOAT*
 - *Envirobase High Performance TRICOAT 2.1* (uses low VOC clearcoats)
 - *Envirobase High Performance TRICOAT NR* (uses National Rule - 4.2 VOC clearcoats)
 - *Global Refinish System BC TRICOAT*
 - *Nexa Autocolor 2K LEAD-FREE BC 3CT*
- All Tri-coat formulas start with a basecoat formula using toners from that specific paint system.
- All of these Tri-coat paint systems use the same tinter for the mid-coat: **VM4350**. This special mid-coat tinter is from the VIBRANCE COLLECTION® line and it is a limited use tinter, so please check available stock prior to mixing.
 - Note: 1 container holds 4 oz. of tinter and will tint approximately 3.5 gallons of mid-coat.
- Each of the Tri-coat paint systems will express the mid-coat formula as 2 components; VM4350 and a common clearcoat code.

○ <i>Aquabase Plus BC 3CT 2.1</i>	<u>P190-YYYY</u>
○ <i>Aquabase Plus BC 3CT NR</i>	<u>P190-XXXX</u>
○ <i>Deltron 2000 DBC TRICOAT</i>	<u>DCXXXX</u>
○ <i>Envirobase High Performance TRICOAT 2.1</i>	<u>ECYYYY</u>
○ <i>Envirobase High Performance TRICOAT NR</i>	<u>DXXXX</u>
○ <i>Global Refinish System BC TRICOAT</i>	<u>DXXXX</u>
○ <i>Nexa Autocolor 2K LEAD-FREE BC 3CT</i>	<u>P190-XXXX</u>
- The common clearcoat codes refer to the premium PPG clearcoats currently used in your shop.
 - Note: This instruction is given as a reminder within the mid-coat formula screen.
- It is recommended to use the same premium clearcoat for the mid-coat and the final clearcoat layer.
- To determine the proper hardener and reduction options proceed in *PaintManager* program software by clicking on the YES button for “Reduce formula” then select your preferred clearcoat from the selection menu.
- The creation of these common clearcoat codes are designed to allow each shop to use their preferred clearcoat as a component in the mid-coat formula. These common clearcoat codes will also allow shops using *PaintManager* program software to keep track of paint usage and maintain accurate VOC reporting.

PREPARATION OF SUBSTRATE

- Damaged body work must be repaired using the approved PPG repair process including selecting the correct under coating system for aluminum, steel and plastic substrates.
- For proper color alignment, finish the body work with the recommended sealer for the basecoat system using the correct G-Shade sealer as directed in *PaintManager* program software.

PREPARATION OF COLOR CHECK PANEL

NOTE: Due to OEM color variation from model to model it is essential that a color check panel be prepared to align the color before applying any ground coat color to the vehicle. The color check panel should be prepared as follows:

- Mix and apply G6 sealer to three color check panels insuring full coverage and allow to flash.
- Mix and apply the ground coat until proper coverage is achieved (Waterborne systems require a control coat).
- Prepare the tinted mid-coat by mixing VM4350 Vivid Ruby Tinter with a premium clearcoat following the PPG supplied formula.

****To avoid potential clearcoat compatibility issues between the tinted mid-coat and the final clearcoat layer, it is strongly recommended to use the same clearcoat throughout the repair process. A minimum of one final clear layer must be applied over the tinted mid-coat.**

****The tinted mid-coat must be reduced and catalyzed as normal following the addition of VM4350 Vivid Ruby Tinter. See the specific clearcoat product bulletin for proper reduction prior to application.**

- Apply one tinted mid-coat layer over all three color check panels. After flash off, remove one panel and apply a second coat to the remaining panels. After flash off, remove another panel and apply a third coat to the last panel. Allow to flash.
- Apply one coat of clear only over all three panels and allow to dry.

CHECKING THE COLOR

- Use the completed color check panels to evaluate the color on the car.
- When one of the color check panels is considered “blendable” to the car, proceed in refinishing the vehicle. Be sure to spray the vehicle in the same manner and technique as the color check panels to achieve proper color alignment.
- If a color adjustment is necessary tint the ground coat in the appropriate color direction and prepare another series of color check panels by repeating the above process. Continue in this fashion until a blendable match is achieved. Be sure to spray the vehicle in the same manner and technique as the color check panels.
- **Important:** The tinted mid-coat layer can only be tinted with VM4350 Vivid Ruby Tinter. Any color adjustments must be made to the ground coat. If necessary, contact the Color Library for additional assistance.

NOTE: When completing the repair, a minimum of one final clear layer must be applied over the tinted clear mid-coat.

PPG Automotive Refinish Bringing innovation to the surface.™

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