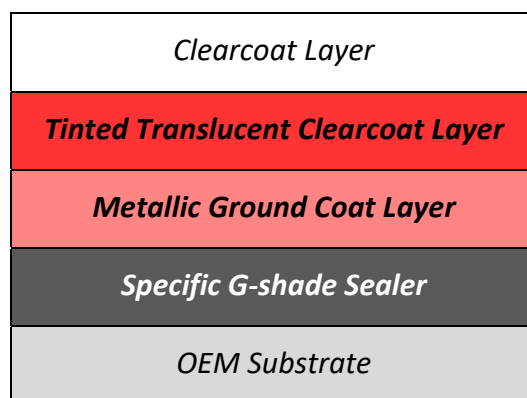




Some of today’s OEM automotive finishes utilize a tinted clear layer to produce a very clean candy apple red effect. The repair process for these colors requires a tinted clearcoat layer that is applied over AQUABASE® Plus, DELTRON® DBC, ENVIROBASE® High Performance, GLOBAL REFINISH SYSTEM® BC and NEXA AUTOCOLOR® 2K® basecoat systems.

The tinted translucent clearcoat layer is made by combining VM4350 Vivid Ruby Tinter with many of PPG’s popular express, speed, production or glamour clearcoats. This special clearcoat tinter is part of the VIBRANCE COLLECTION® line and it is a limited use tinter, so please check available stock prior to mixing.

The refinish repair for these types of colors consists of a tri-coat process made up of a metallic ground coat layer, a tinted translucent clearcoat layer, followed by a final clearcoat layer. See illustration below:



Brand specific formulas for colors containing a tinted clearcoat layer are available in PPG’s PAINTMANAGER® program software for mixing and managing the paint operation or by calling PPG at 800-647-6050 and follow the prompts to the Color Library.

SELECTING THE PROPER PAINT SYSTEM FROM *PaintManager* PLATFORM

- Search the OEM color code in *PaintManager* platform. When a Tri-Coat formula is listed as shown in this list, it is an indication that the formula contains a tinted clearcoat with VM4350. Choose one of the listed Tri-coat systems for optimum color match.
 - *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 of these tri-coat formulas start with a basecoat ground layer using toners from the specified paint system, followed by a tinted clearcoat made up of PPG premium clearcoat mixed with VM4350.
- When mixing the tinted clearcoat layer, each of the Tri-coat paint systems will express the formula as 2 components; A generic clearcoat code and VM4350. The clearcoat code will show as follows on your mixing screen.

○ <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>ECYYY</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 creation of these common clearcoat codes is meant 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.
- It is recommended to use the same premium clearcoat for the tinted clearcoat and the final clearcoat layers.
 - **Color blenders such as DBC500, VWM500, D895 and P190-1002 are not suitable replacements for PPG premium clearcoats.**
- To determine the proper hardener and reducer options proceed in *PaintManager* platform software by clicking on the YES button when “Reduce formula?” pops on the screen after mixing the clearcoat and VM4350. Select your clearcoat from the menu and choose the hardener and/or reducer that is best suited for the size of the repair and booth conditions.
- **The tinted clearcoat must be reduced and catalyzed as normal following the addition of VM4350 Vivid Ruby Tinter. See the specific clearcoat product bulletin for proper mix ratios prior to application.**

PREPARATION OF THE SUBSTRATE

- Damaged body panels must be repaired using an approved PPG repair process, including using the correct under coating system for aluminum, steel and plastic substrates.
- Finish all body repairs and prep all blend panels for a refinish repair including sealer application. See specific product bulletins for the basecoat system and sealer for sanding and pre-cleaning instructions.

- For proper color alignment, begin the refinishing process using the recommended sealer for the basecoat system being utilized. The correct G-Shade will be noted in *PaintManager* platform.
- Be sure to thoroughly clean and tack off all surfaces with approved PPG cleaners before applying sealer.

PREPARATION OF THE 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 the appropriate G-shade sealer to three color check panels insuring full coverage and allow to flash.
- Mix and apply the ground coat until proper color is achieved (Waterborne systems require a control coat).
- Prepare the tinted clearcoat by mixing VM4350 Vivid Ruby Tinter with a premium clearcoat following the PPG supplied formula.
- To avoid potential clearcoat compatibility issues between the tinted clearcoat and the final clearcoat layer, it is strongly recommended to use the same clearcoat throughout the repair process. A minimum of one final un-tinted clear layer must be applied over the tinted clearcoat.
- Apply one tinted clearcoat 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 un-tinted clear 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.
- **Important:** The tinted clearcoat 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 at 800-647-6050 and follow the prompts.

PERFORMING THE REPAIR

- Reduce and spray the basecoat layer as normal per instructions in the Technical Data Sheet for the basecoat being utilized for the repair.
- Apply medium light coats of the ground coat until proper color is achieved as determined by the color check panel (Waterborne systems require a control coat). Blend adjacent panels as necessary.

- Allow each coat of basecoat color to flash before applying the next. After each coat is thoroughly flashed, tack with a PPG ONECHOICE® tack rag (part #SX1070) to remove any dust or overspray that may have settled on the surface.
- Apply the translucent tinted clearcoat layer to the repair using the number of coats determined by the color check panels and using the same application technique to ensure similar coverage.
- **The tinted clearcoat must be reduced and catalyzed as normal following the addition of VM4350 Vivid Ruby Tinter. See the specific clearcoat product bulletin for proper mix ratios prior to application.**
- **When completing the repair, a minimum of one final PPG Premium Clearcoat layer must be applied edge to edge over the tinted clearcoat layer.**



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