



GLOBAL REFINISH  
SYSTEM



January 2012

---

# Product Information

---

## GRS Deltron Matt Clearcoat System

D8115 Matt Clearcoat  
D8117 Semi-Gloss Clearcoat

### PRODUCTS

Deltron Matt Clearcoat	D8115
Deltron Semi Gloss Clearcoat	D8117
Deltron MS Hardeners	D803, D841, D861
Deltron Thinners	D807, D812, D869
Deltron Low VOC Thinners	D8718, D8719, D8720

---

### PRODUCT DESCRIPTION

The Clearcoats D8115 (Matt) and D8117 (Semi-Gloss) are designed for use over Envirobase High Performance basecoats. D8115 / D8117 may be used over Deltron basecoat for repair work not controlled by EU Directive 2004/42.

Deltron Matt Clearcoat System consists of two versatile 2K acrylic urethane clearcoats designed to reproduce a range of low gloss levels for the specialised repairs of vehicles or areas of vehicles originally finished with a low gloss clearcoat over a single or multistage colour basecoat system (e.g. Mercedes full body Matt Finish). To allow for the normal gloss variations - due to colour, model, position of repair on vehicle etc., the actual mix of the two Clearcoats can be varied to match the vehicle to be repaired.

The D8115 / D8117 or mixes of the two may be used over rigid plastics without the need for special additives.

The D8115 / D8117 Clearcoats can be used with Deltron MS hardeners D803 / D841 / D861.

## PREPARATION OF SUBSTRATE

When masking a repair, care should be taken to minimise direct contact of masking tape onto the original Matt finish. Where it is necessary to use masking tape directly on the original finish, the tape must be removed before baking to avoid marking of the original which may not recover.

The Deltron D8115 / D8117 Clearcoats must be applied on top of a clean and dust-free basecoat. The light use of a tack cloth is recommended after the basecoat has flashed off.

Care should be taken to avoid dirt inclusion at all stages. Rectification of dirt inclusion in Matt or Low Gloss finishes is not possible after the final coat of clearcoat.

## D8115/D8117 MIX RATIOS

To allow for normal variations in the gloss level, depending on colour, model, position of repair on vehicle, it is possible to mix the D8115 and D8117 together in any ratio to match the required gloss for a particular repair. The % ratio's quoted below are the best start point for the 5 gloss level ranges.

Gloss Level	FC01	FC02	FC03	FC04	FC05
	<b>Matt</b> e.g. Lamborghini full body Matt Finish		<b>Low Gloss</b> e.g. Mercedes, Smart, BMW, Fiat full body Matt finishes		<b>Semi Gloss</b> e.g. Older Mercedes Plastic side mouldings
Clearcoat	Percentage Parts by Weight (%)				
<b>D8115</b>	100	85	70	40	0
<b>D8117</b>	0	15	30	60	100

The resulting mix is then activated and thinned as below.

**Note: Test panels MUST be produced using the intended hardener/thinner/ratio/spraygun combination to check for colour and gloss level against the vehicle to be repaired. D807 / D8218 Thinners are recommended to only be used on small areas or components (Mirror covers etc.)**

## \* HARDENER / THINNER / MIX RATIO SELECTION

Smaller areas / Verticals / Higher Gloss  
Below 25°C  
Smaller Spraygun tip size



Faster Hardener/Thinner

Larger Areas / Horizontals / Lower Gloss  
Above 25°C  
Larger Spraygun tip size



Slower Hardener/Thinner

---

## MIXING RATIO

Mixing ratios with MS Hardeners D803 / D841 / D861

	<u>By Volume</u>	<u>By Weight</u>
D8115 / D8117	4 volumes	See table, Page 5
Hardener*	1 volume	
Thinner*	2 volumes	

\* Choose HS Hardener / Thinner according to guidance below

---

## MIXED PRODUCT DETAILS

Potlife at 20°C: 1 - 2 hours depending on hardener/thinner

Spray viscosity at 20°C 15 seconds DIN4.

---

## APPLICATION AND FLASH-OFF



*Spraygun set-up:* 1.2 - 1.4 mm

*Application* 1 Full single coat  
Flash off until evenly Matt all over  
+  
1 Full single coat followed immediately by lighter  
(½ coat) cross coat.  
Flash off until evenly Matt all over before baking.

*Flash off between spray coats* 15 - 30 minutes or until fully and evenly matt over the whole repair area.\*

*Flash off before bake or IR dry* 15 - 30 minutes or until fully and evenly matt over the whole repair area.\*

**\*Note:** Allowing the Clearcoat Mix to flash off fully between coats and before bake is important to achieve an even appearance and gloss level over the whole area. The actual flash off times will depend on the hardener/thinner combination required to achieve the correct gloss effect and could vary between 15 – 45 minutes.

---

## DRYING TIMES

Through dry at 60 °C\*

30 minutes with D803 / D841,  
40 minutes with D861

Through dry at IR  
(medium wave)

8 - 15 minutes (depending upon colour)



\*Bake times are for quoted metal temperature. Additional time should be allowed in the bake schedule to allow metal to reach recommended temperature.

Total dry film build:

45 – 55 µm

---

## REPAIR AND RECOATING



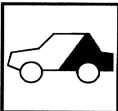
*Sanding:*

Essential before recoating to ensure good adhesion

- *grade wet*
- *grade dry*

P800  
P400 - P500

*Overcoat / Re-coat time:*



- *Force dry at 60 °C, or IR*
- *Air drying at 20 °C*

After cooling  
12 hours

*Overcoat with:*

Deltron primers  
Envirobase High Performance  
Deltron topcoats

## WEIGHT MIX TABLES FOR D8115 / D8117

### GUIDELINES FOR WEIGHT MIXING

Where a specific volume of clearcoat mix is required, this may be best achieved by weight mixing, using the guidelines below. The weights are cumulative - please do **NOT** tare the balance between additions.

Target Volume of RFU Paint required (Litres) @ 4/1/2	Weight Clearcoat D8115/D8117 or Blends	Weight HS Hardener D803/D841/D861	Weight Thinner D807/D812/D869
<b>DO NOT TARE THE SCALE BETWEEN ADDITIONS</b>			
0.10 L	59g	74g	99g
0.20 L	119g	149g	198g
0.25 L	149g	186g	248g
0.33 L	196g	245g	327g
0.50 L	297g	371g	496g
0.75 L	446g	557g	743g
1.00 L	594g	743g	991g
1.50 L	891g	1114g	1487g
2.00 L	1189g	1485g	1983g
2.50 L	1486g	1857g	2478g

Target Volume of RFU Paint required (Litres) @ 4/1/2	Weight Clearcoat D8115/D8117 or Blends	Weight HS Hardener D803/D841/D861	Weight Thinner D8718/D8719/D8720
<b>DO NOT TARE THE SCALE BETWEEN ADDITIONS</b>			
0.10 L	59g	74g	98g
0.20 L	119g	149g	195g
0.25 L	149g	186g	244g
0.33 L	196g	245g	322g
0.50 L	297g	371g	489g
0.75 L	446g	557g	733g
1.00 L	594g	743g	977g
1.50 L	891g	1114g	1466g
2.00 L	1189g	1485g	1954g
2.50 L	1486g	1857g	2443g

## REPAIR OF FULL BODY MATT FINISHES BLENDING THE WB BASECOAT

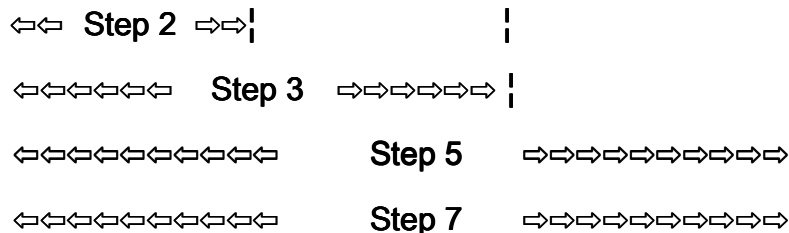
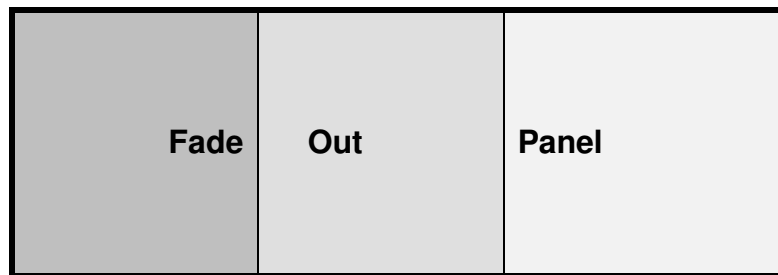
Fading out of the Matt Clearcoat itself is not possible because the resulting clearcoat edge cannot be successfully polished to give an invisible repair. However, depending on the colour (Lighter shades) and the effect of the OEM clearcoat, the WB basecoat layer can be faded out using the steps listed below, followed by Matt clearcoating to the next convenient panel edge. When using Deltron basecoat under the Matt Clearcoat, the basecoat can be blended as normal.

Note: - For darker colours (especially black) depending on the impact of the OEM matt clearcoat on the overall colour match, it is possible that the repair clearcoat combined with the OEM clearcoat could affect the colour compared to the next panel. In such cases this blending technique may not be possible and complete panel repair with basecoat and clearcoat is a more practical option.

1. Prepare the whole panel to be faded onto up to the panel edge or to a break line.
2. Fade the normally thinned basecoat to approx. 30% across the fade out panel at reduced spraygun pressure.
3. Mix some of the remaining thinned basecoat in the gun pot, 1 part basecoat to 3 parts T490 Clear Adjuster. Using the resulting basecoat mix, fade the basecoat further to approx. 60% across the fade out panel, again at reduced spraygun pressure.
4. Pour out the reduced basecoat from the previous step from the gun pot, leaving a small amount of colour on the sides of the pot. Then add enough T490 for the application of 1 full coat to the fade out panel. Stir the mix to incorporate the small amount of basecoat colour to give the T490 Clear Adjuster a slight tint.
5. Apply 1 full coat of the tinted Clear Adjuster layer over the whole of fade out panel, up to the edge where the Matt Clearcoat will be applied. This coat is applied at normal basecoat pressure.

This step will provide an even surface to apply the Matt Clearcoat over. Omitting this step will leave a basecoat edge which could result in uneven gloss levels across the panel.

6. Allow the basecoat to fully flash off as normal before applying the Matt Clearcoat.
7. Using the Matt Clearcoat mix established from the test panels to give to best gloss level match to the area of the vehicle being repaired, apply the Matt Clearcoat following the application recommendation given earlier.



---

## PERFORMANCE AND LIMITATIONS

The Gloss levels achieved with this clear may vary depending upon film thickness and application. Low film thickness and dry application will give a Lower Gloss. High film thickness and wet application will give a higher gloss level.

To remove minor dirt inclusions in the final finish, the repair should be fully dried, de-nibbed after cooling and **one** further coat of the Clearcoat Mix applied. Care should be taken to avoid too high clearcoat film thicknesses because the final colour could be affected. In this situation, the repair will require sanding and recoating with Basecoat and Clearcoat.

Dirt removal from the final Matt Finish is not possible.

---

## EQUIPMENT CLEANING

After use, clean all equipment thoroughly with cleaning solvent or thinner.

---

## GENERAL CARE AND MAINTENANCE OF MATT FINISHES

**The following guidance on Care and Cleaning of matt finish vehicles is aimed at the car owner, and applies to both the OE and the repair finish. Particular care must be taken with Matt Finishes to maintain an original even Matt effect.**

### **Guidance for the car owner on maintaining the even matt effect over time**

Matt/Gloss finishes can be relatively easily marked with general handling and day to day use (door/bonnet/boot opening, shoe scuffing on entry or exit of vehicle etc.). Care should be taken with these operations because marking or changing of the Matt effect could result.

Care should be taken to avoid spillage of fuel onto the Matt/Low Gloss finishes. Spilt fuel should be removed as soon as possible using the washing guidelines below, to avoid permanent damage or altering of the Matt/Low Gloss effect.

1. In order to keep the Matt surface effect, the use of paint cleaner, abrasives or polishes and wax polishes **must** be avoided. The vehicle **must** not be polished.
2. Polishing will lead to a higher, uneven gloss effect.
3. Cleaning/Polishing with unsuitable materials could alter the Matt effect (generally increased gloss).
4. Automated car washing machines should be avoided. The preferred car washing method is by hand with a soft sponge, neutral soap and lots of water. Too frequent car washing could over a period of time lead to increased and inconsistent gloss levels across a car panel. Washing under direct sunlight should be avoided.
5. Insects and bird residues should be removed immediately. The residues should be soaked in water to soften and/or removed carefully with a high pressure cleaning equipment. In the case of strongly adhered residues, a spray on insect remover should be used prior to washing.
6. Whenever using any type of cleaning fluids with soft sponges or cloths, it is essential not to apply pressure or rub the Matt finish. A gentle wipe/spray on, wipe off technique should be used. Applying pressure will alter the Matt effect and result in an uneven appearance.

---

## HEALTH AND SAFETY

**These products are for professional use only**, and are not to be used for purposes other than those specified. The information on this TDS is based on present scientific and technical knowledge, and it is the responsibility of the user to take all necessary steps in order to ensure the suitability of the product for the intended purpose. For Health and Safety information please refer to the material Safety Data Sheet, also available at: [www.ppgrefinish.com](http://www.ppgrefinish.com)

**PPG Industries (UK) Limited.  
Auto Refinish  
Customer Service and Sales Group,  
Needham Road,  
Stowmarket,  
Suffolk.  
IP14 2AD,  
England.  
Tel: 01449 771775  
Fax: 01449 773480**



Copyright © 2012 PPG Industries, all rights reserved.