



June 2013

Product Information

GRS Deltron Matt Clearcoat System

D8115 Matt Clearcoat D8117 Semi-Gloss Clearcoat

PRODUCTS

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

PRODUCT DESCRIPTION

The Clearcoats D8115 (Matt) and D8117 (Semi-Gloss) are designed for use over ENVIROBASE[®] High Performance. 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, postion 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.

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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
	Matt e.g. Lamborghini full body Matt Finish		Low Gloss e.g. Mercedes, Smart, BMW, Fiat full body Matt finishes		Semi Gloss e.g. Older Mercedes Plastic side mouldings
Clearcoat	Percentage Parts by Weight (%)				
D8115	100	70	50	30	0
D8117	0	30	50	70	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 / D8718 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 Larger Areas / Horizontals / Lower Gloss Above 25°C Larger Spraygun tip size

Faster Hardener/Thinner

Slower Hardener/Thinner

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MIXING RATIO

Mixing ratios with MS Hardeners D803 / D841 / D861

By Volume

4 volumes

1 volume

2 volumes

<u>By Weight</u>

D8115 / D8117 Hardener* Thinner* See table, Page 5

* 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

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.*	
is important to achiev area. The actual flas	at Mix to flash off fully between coats and before bake e an even appearance and gloss level over the whole h off times will depend on the hardener/thinner to achieve the correct gloss effect and could vary utes.	

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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:

-

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grade wet



Essential before recoating to ensure good adhesion P800

Deltron topcoats

grade dry P400 - P500

Overcoat / Re-coat time:

 Force dry at 60°C, or IR 	After cooling
- Air drying at 20°C	12 hours
Overcoat with:	Deltron primers Envirobase High Performance

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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
	DO NOT TARE THE SCALE BETWEEN ADDITIONS		
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
	DO NOT TARE THE SCALE BETWEEN ADDITIONS		
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

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REPAIR OF FULL BODY MATT FINISHES BLENDING THE WB BASECOAT + DUAL CLEAR MATT REPAIR PROCESS

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 and the effect of the OEM clearcoat, the WB basecoat layer can be faded out as normal, followed by the Dual Clear Matt Repair Process to the next convenient panel edge, using the steps listed below.

To allow for the normal gloss variations - due to colour, model, position of repair on vehicle etc., the actual mix of the two Matt Clearcoats can be varied to match the gloss level of the vehicle to be repaired. Using the D893 as the 1st coat in this process will result in a slightly higher gloss than when the D8115/D8117 are used as normal for both coats.

Note: Test panels MUST be produced to check for colour and gloss level against the vehicle to be repaired. It is important to spray these test panels with the ancillaries, application method and conditions that will be used for the actual car.

Activation by Volume or refer to relevant TDS or ITfor Weight Activation

D893	3 volumes	D8115 / D8117	3 volumes
D841 Hardener	1 volume	Hardener	1 volume
D807/D8718 Thinner	0.5 volumes	Thinner	1.5 volumes

- Step 1. Prepare the whole panel to be faded onto up to the panel edge or to a break line. Apply coats of normally thinned WB basecoat to the repaired panels to achieve the required coverage.
- Step 2. Blend the basecoat as normal 60% across the fade out panel.
- Step 3. 1st coat Clearcoat Using the D8135 Clearcoat, apply 1 single coat to the whole repair area. Allow this coat to flash-off for 30 minutes before applying the Matt Clearcoat.
- Step 4. 2nd Coat Clearcoat Use the D8115 / D8117 Matt Clearcoat mix established from the test panels to give to best gloss level match to the area of the vehicle being repaired.

Activate & apply the Matt Clearcoat mix over the whole repair area using 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.

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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

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