



GLOBAL REFINISH
SYSTEM

May 2016

Product Information



D8175 Rapid Performance Clearcoat

PRODUCTS

UHS Rapid Performance Clearcoat	D8175
UHS Hardener	D8305
Accelerator Thinner	D8745
High Temperature Accelerated Thinner	D8746

For textured finishes or painting of flexible substrates:

DELTRON® Plasticiser	D814 to plasticise finishes over a flexible substrate
<i>Deltron</i> Matt Flexibiliser	D819 for textured appearance over a flexible substrate
<i>Deltron</i> Texture Additive	D843 to create a fine textured 'suede' effect
<i>Deltron</i> Leather Grain Additive	D844 to create a coarser, more pronounced textured finish

PRODUCT DESCRIPTION

D8175 UHS Rapid Performance Clearcoat has been developed using the latest PPG clearcoat technology to enhance the innovative PPG paint system.

D8175 provides bodyshops with "Speed without compromise". An easy to use clearcoat which combines the ultimate high speed drying, easy polish and unparalleled flexibility for all repairs. Unlike other fast clearcoats, D8175 dry in 5 min at 60 degrees or 20 min at 40 degrees and still deliver a market leading final appearance and can be polished right after cooling down. It comes with a smart and simple package with one hardener and dedicated thinners for Standard and high temperature application



PREPARATION OF SUBSTRATE

Apply on top of a clean and dust free ENVIROBASE® High Performance (the use of a tack rag is recommended to remove dust from the basecoat film).

MIXING RATIO

Mixing ratios with UHS Hardener:

	<u>By Volume</u>
D8175	2 vol
D8305	2 vol
D8745/46*	0.5 vol

- Choose Thinner according to application temperature*.
- As with all ultra high solids products, cold ready for use paint temperatures can lead to more difficult application and overspray absorption. It is strongly recommended that ready for use product is applied at a temperature greater than 15°C.

MIXING BY WEIGHT:

The weights are cumulative - please do **NOT** tare the balance between additions.

Volume of RFU paint required (Litres)	D8175	D8305	D8745/46
0,1 L	45,7 g	91,2 g	101,4 g
0,20 L	91,4 g	182,5 g	202,9 g
0,25 L	114,2 g	228,1 g	253,6 g
0,33 L	150,8 g	301,1 g	334,7 g
0,50 L	228,4 g	456,2 g	507,2 g
0,75 L	342,7 g	684,3 g	760,8 g
1,00 L	456,9 g	912,4 g	1014,3 g
1,50 L	685,3 g	1368,7 g	1521,5 g
2,00 L	913,8 g	1824,9 g	2028,7 g
2,50 L	1142,2 g	2281,1 g	2535,8 g

THINNER SELECTION

The selection of thinner depends on the temperature application

Temperature application:

Up to 26°C

Over 26°C

THINNER

D8745 Acc. Thinner

D8746 High Temperature Acc. Thinner



RFU MIXED PRODUCT DETAILS

Pot-life at 20°C

Acc. Thinner
High Temp Acc. Thinner

1 hour sprayable time at 20°C DIN4cup.
2 hour sprayable time at 20°C DIN4cup.

Viscosity RFU 17-19 seconds DIN4 cup at 20°C.

SPRAYGUN SET UP

Spray Nozzle: **1.2 mm Fluid Tip -**

Spray Pressure: 2.0 - 2.2 Bar

APPLICATION AND FLASH OFF



Two Coat Process:

Application

**Apply 1 light/medium & 1 full coat.
The first coat should be applied as a light closed coat.
Second coat is applied as a full coat.**

Flash off between coats **5 minutes flash off.**

Flash off before bake or IR **5 minutes**

Recommended film thickness: 50-60 µm dry film thickness



DRYING TIMES

- Through dry at 60°C*
 - 5 minutes with D8745 Acc. Thinner
 - 10 minutes with D8746 High Temp Acc. Thinner

- Through dry at 40°C*
 - 20 minutes with D8745 Acc. Thinner
 - 30 minutes with D8746 High Temp Acc. Thinner

- Through dry at 20°C Airdry
 - 90 minutes with D8745 Acc. Thinner
 - 120 minutes with D8746 High Temp Acc. Thinner

- Through dry at IR
 - with High Temp Acc. Thinner 6 minutes (depending upon colour)
 - Metal temperature 90°C-100°C



**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: 50 – 60 µm

OVERCOATING/RECOATING

Overcoat / Recoat time - If Force dried, after cooling, or after Air drying.

It is essential to sand before recoating to ensure good adhesion.
Sand with P800 (wet) or P400 (Dry).

Overcoat with - Any PPG 2K primer, or Envirobase HP.

POLISHING

After the indicated baking time it is ready to polish after cooling down.

When air dry, ready to polish after 120 min @ 20°C.

If left longer, polishing could result more difficult.



FADE - OUT REPAIR PROCEDURE

- Prepare the fade out area with a 3000 grade soft pad on a DA sander.
- Apply D8175 according to the information above.
- Take care to minimise the clearcoat edge in the fade-out area.
- Apply the following blend to the clearcoat edge to melt the edge

Target volume of RFU paint required	D8175	D8305	D8745/46	D8430
0.1L	45.7g	91.2g	101.4g	106g

- This is the maximum amount of spot blender allowed by VOC legislation
- Immediately melt overspray edge using D8731 Aerosol Spot Blender or D8430 Spot Blender.
- It is not recommended to fade out on ½ panels such as doors. It is more efficient to Clearcoat the whole panel.
- After a thorough bake or if necessary application of an IR lamp for 5 mins, sand the edge briefly with 3000 grade soft pad on a DA sander.
- This step is not essential but makes the polishing much easier.
- Polish with normal process system.



PAINTING OF PLASTIC SUBSTRATES - TEXTURED FINISHES

To obtain a textured finish with D8175 Rapid Performance Clearcoat, it is necessary to include flex or texture additives in the mix. Additives are also required when applying D8175 over a flexible substrate. The additives required and the appropriate volume and/or weight mix ratios are indicated in microfiches if relevant or in the tables below.

Note: The majority of plastics used on cars are considered **Rigid**. These plastics may have some flexibility when painted off the car, but are rigid once mounted. UHS Clearcoats only require the addition of the Plasticiser Additive (See **Flexible** chart below) when painting very flexible plastics, mostly found on older vehicles, e.g. foam type.

Cumulative Mixing by Weight

Do not tare the balance between additions

<u>Substrate</u>	<i>Appearance</i>	<i>D8175</i>	<i>D843</i>	<i>D844</i>	<i>D814</i>	<i>D819</i>	<i>D8205</i>	<i>Acc. Thinner</i>
RIGID	Gloss	456,9g	-	-	-	-	912,0g	1013,3g
	Matt Textured	243,8g	531,3g	-	-	-	814,7g	987,7g
	Leather Grain	314,7g	-	557,0g	-	-	870,5g	991,5g
FLEXIBLE	Gloss	390,4g	-	-	508,4g	-	820,3g	1008,2g
	Matt Textured	192,8g	465,6g	-	-	564,3g	962,0g	991,3g
	Leather Grain	252,8g	-	447,5g	-	576,9g	912,7g	1002,4g

EQUIPMENT CLEANING

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



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.

VOC INFORMATION

The EU limit value for this product (product category: IIB.d) in ready to use form is max. 420g/litre of VOC. The VOC content of this product in ready to use form is max. 420g/litre.

Depending on the chosen mode of use, the actual ready to use VOC of this product may be lower than that specified by the EU Directive code.

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