



GLOBAL REFINISH
SYSTEM



May 2012

Product Information



Waterborne Clearcoat D8186

D8186 Waterborne Clearcoat

PRODUCTS

Waterborne Clearcoat	D8186
Waterborne Clearcoat Hardener	D8221
Thinner	D8448

PRODUCT DESCRIPTION

D8186 Waterborne Clearcoat is clearcoat based on the latest waterborne technology. D8186 has been optimized for use over Envirobase basecoat to deliver a full waterborne alternative for the repair of OEM finishes. The simple application process produces a high quality finish from the gun and is a real alternative for bodyshops wishing to minimise VOC emissions.

PREPARATION OF SUBSTRATE

D8186 Waterborne Clearcoat must be applied on top of clean and dust-free Envirobase High Performance basecoat. The use of a tack rag is recommended.

MIXING RATIO

Mixing ratios:

	<u>By Volume</u>	<u>By Weight</u>
Clearcoat D8186	2	See table, Page 4
Hardener D8221	1	
Thinner D8448	1.6 – 1.8	

- **Add hardener and stir well then add thinner and stir well again.**
- **Care should taken to ensure that the 3 components are thoroughly mixed and incorporated together. Use the mixing stick to ensure any thicker material is removed from the sides of the container and fully mixed in.**
- **After thoroughly stirring, check the mix on the mixing stick visually to ensure even incorporation of the hardener and thinner.**
- 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, ideally 20°C.

MIXED PRODUCT DETAILS

Potlife at 20°C: 2 hours

Spray viscosity at 20°C 20 - 21 seconds DIN4.

Initial viscosity after mixing could be higher but this will not effect the application

APPLICATION AND FLASH OFF



Spraygun set-up: 1.3 mm

Single Visit Process

Application Apply 1 even light coat followed by 1 full coat with 1 minute flash off between coats to give 50-60 microns dry film build.
The first coat should be applied to all repair panels before the second coat is applied.
Avoid very heavy wet coats trying to achieve flow under the spraygun, the clearcoat will flow during the flash off and when baking.

Flash off before bake 5 minutes



DRYING TIMES



Through dry at 60°C* 40 min @ 60°C panel temperature

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

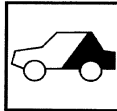
REPAIR AND RECOATING



Sanding: Essential before recoating to ensure good adhesion

- *grade wet* P800
- *grade dry* P400 - P500

Overcoat / Re-coat time:



- *Force dry* After cooling



If polishing is required, i.e. to remove dirt nibs, it is recommended that it is carried out between 1 hour and 24 hours after the quoted drying time.
Denib with P1200, followed by P1500 dry disc.

Lightly damp a 3M Trizact P3000 disc or similar with clean water ensuring that the P1500 scratches are eliminated.

Use PPG Specialty Polishing system SPP1001.

It is important to start at minimum speed, to avoid the surface becoming too hot.
If necessary, allow the panel to cool down before continuing to polish.



BLENDING REPAIR PROCEDURE

Step 1 - Apply WB Clearcoat keeping the edge of the repair smooth arcing the spraygun.

Step 2 - Use 100% clean Thinner, D8448, over the edge of the repair to melt in the overspray edge.
Set spraygun needle at ½ turn out from fully closed to avoid over application of the Thinner.

Step 3 - Allow a minimum of 1 hour after baking before polishing the repair edge.

Note: The repair must be done within a well prepared area

WEIGHT MIX TABLE FOR D8186 WB CLEARCOAT

<p>GUIDELINES FOR WEIGHT MIXING Where a specific volume of Waterborne Clearcoat mix is required, this may be best achieved by weight mixing, using the guidelines below.</p> <p>The weights of Clearcoat and Hardener are cumulative - please do NOT tare the balance between additions. After Hardener addition, stir well and tare the balance, leaving the stirring stick in the container. Add the required weight of Thinner and stir the mix thoroughly. See full mixing instructions on page 2.</p>					
Target Volume of RFU Paint required (Litres) (1.8 parts vol. Thinner)	Weight Waterborne Clearcoat D8186	Weight Hardener D8221		Weight Thinner D8448	
Volume Mix =	2	1		1.6	1.8
0.10 L	41.7	62.5		33.4	37.6
0.20 L	83.4	125.0	STIR	66.7	75.1
0.25 L	104.3	156.3	WELL	83.4	93.9
0.33 L	137.7	205.7		110.1	123.8
0.50 L	208.5	312.5	THEN	166.8	187.7
0.75 L	312.8	468.8		250.2	281.5
1.00 L	417	625	TARE	334	375
1.50 L	626	938	BALANCE	500	563
2.00 L	834	1250		667	750
2.50 L	1043	1563		834	939



EQUIPMENT CLEANING

After use, clean all equipment thoroughly with cleaning solvent for WB products.

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.

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

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

