



GLOBAL REFINISH  
SYSTEM



July 2011

# Product Information



## **D8501 D8505 D8507 2K Primer DP4000**

*D8501 2K primer DP4000 White G1  
D8505 2K primer DP4000 Grey G5  
D8507 2K primer DP4000 Dark Grey G7  
D8238 HS Fast Hardener  
D8239 HS Slow Hardener  
D8715 Productive Thinner*

## **PRODUCT DESCRIPTION**

DP4000, designed on the latest primer technology, can be used to optimise the priming process when used in combination with Envirobase High Performance and Deltron Progress UHS. It is designed to deliver a high quality final appearance through a non sand process that is equivalent to a sanded primer. Excellent application, very smooth flow and superb holdout properties are at the core of this product's performance.

Due to the excellent adhesion characteristics of DP4000, no sanding of sound OE electrocoat is required, providing a very fast new panel process. DP4000 can be recoated directly after 15 minutes, or for up to 5 days with no sanding, so new parts can be primed in batches in advance with minimal preparation, and can be held ready for the topcoating process with the rest of the vehicle.

The strong adhesion and anti-corrosion characteristics mean that small rub throughs on electrocoated panels do not require the use of an etch primer before DP4000 is applied.

## **PREPARATION OF SUBSTRATE- SANDING**



***DP4000 can be applied over a wide range of substrates including:***

- Well cleaned unsanded Electrocoat.
- Bare steel areas up to 10cm diameter without the need for an Etch Primer
- Galvanised Steel for rub throughs up to 10cm maximum diameter
- Zintec for rub throughs up to 10cm maximum diameter
- Aluminium and alloys for rub throughs up to 10cm maximum diameter
- Aged painted and original surfaces sanded with P320 or finer
- GRP, Fibreglass P120/ P240/P320
- Polyester Filler P120/ P240/P320

**Note:** A 2-pack Etch Primer should be applied prior to the application of DP4000 for areas of bare metal above 10cm diameter, area's particularly vulnerable to corrosion or for OEM warranty standard corrosion performance.

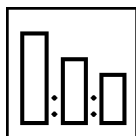


## **PREPARATION OF SUBSTRATE – DEGREASING**

Before any preparation work, wash all surfaces to be painted with soap and water. Rinse and allow to dry before degreasing with a suitable PPG substrate cleaner. Ensure all substrates are thoroughly cleaned and dried before and after each stage of the preparation work. Always wipe substrate cleaner off the panel surface immediately, using a clean dry cloth.

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## MIXING RATIOS



Mixing Ratios

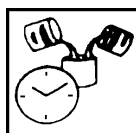
By Volume:

2K Primer DP4000	2
Hardener	1
2K Thinner	0.5

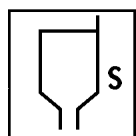
Recommended Hardeners: D8238 / D8239 PPG  
Recommended Thinners: D8715 (for optimum performance at 20 - 25°C)  
D866 / D807 / D812 or D8718 / D8719

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## MIXED PRODUCT DETAILS



Potlife at 20°C: 1 hour.



Spray viscosity at 20°C: 16 - 18 seconds DIN4

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## HARDENER AND THINNER SELECTION

<u>Temperature</u>	<u>HS Hardener</u>	<u>Thinner</u>
Below 25°C	D8238	D8715
25°C - 30°C	D8238	D866 or D807 or D8718 Thinner
Over 30°C	D8239	D812 or D8719 Slow Thinner

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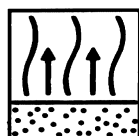
## APPLICATION AND FLASH OFF



Spraygun set-up: 1.2 -1.3mm  
Spray pressure: See spraygun manufacturers information



Number of coats: Apply 1 full single coat or 1 light + 1 full to give a film thickness of 25-35 microns (1.0 - 1.4 thou.)  
Apply to achieve an even finish. Do not apply heavy coats.



Flash-off at 20°C:  
Before topcoat 15 minutes



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## DRYING TIMES



- *Ready for topcoat* 15 minutes
- *Scotch brite and preclean* 3 days
- *Sand* > 5 days
- *Dry to sand at 60°C* 30 minutes
- *Dry to sand with Infra Red (Medium Wave)* 5 min flash 10 min. cure
- For use with Gas/IR please use slowest Hardener and Thinner options. 50 cm at 110°C

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## OVERCOATING



- Overcoat / Re-coat time: Minimum: 15 minutes.  
Maximum: 5 Days without sanding.
- Preclean before topcoating if left more than 8 hours.
- Light denibbing and precleaning is recommended if this primer is left more than 3 days before topcoating.
- If used for Spot repair, it is recommended that this primer should be force dried either at 60°C for 30 minutes or Infra Red dried. Once cool sand with P400 / 500 before overcoating.

Overcoat with: Deltron Progress UHS, Envirobase HP

Normally DP4000 does not require flatting and can be directly topcoated.  
If some dirt inclusion occurs, light flatting/denibbing can be carried out after the first coat of Envirobase High Performance using P800 with foam pad otherwise after force drying for any other need.



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## PROCESSING ALTERNATIVES

DP4000 is especially useful for painting batches of small parts ready for the topcoating process. The excellent flow characteristics allow the OE quality finish to be replicated without sanding.

DP4000 can be topcoated using the following alternatives:

- Flashed off 15 minutes or any time same day without sanding
- Recoated unsanded for up to 5 days.  
(light denibbing and precleaning is required after overnight dry to prevent any workshop contamination from the environment from affecting the topcoat performance).

## DP4000 CAN BE USED IN PRIMER FILLER MODE USING THE FOLLOWING RECOMMENDATIONS

Mix and use the gun set up as recommended in the main Process note.

Apply 1 light + 2 full coats

This gives a film thickness of approximately 100-110 microns

Bake for 30 minutes at 60°C metal temperature.

IR medium wave 5 min flash off, followed by a 10 min cure time.

IR/GAS 50 cm 110°C.

After cooling dry sand with P400 or finer

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## EQUIPMENT CLEANING

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

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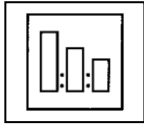
## PAINTING PLASTICS

DP4000 can be applied directly over well prepared and cleaned ABS, NORYL, PC/PBT, LEXAN, PUR and SMC, as well as sanded and pre-primed bumpers.

Large bare plastic sections or rub through areas on bumpers, e.g. PP, TPO, PP/EPDM should be primed first with a light coat of D820 Plastic Primer, and flashed off 10 minutes before the application of DP4000.

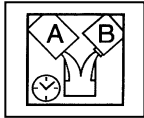


## 2K PRIMER DP4000



### Mixing ratio by volume

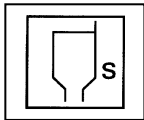
2K Primer DP4000      2:1:0,5



Pot Life at 20°C.      60 minutes

### Hardener / Thinner Selection

<u>Temperature</u>	<u>HS Hardener</u>	<u>Thinner</u>
Below 25°C	D8238	D8715
25°C - 30°C	D8238	D866 or D807 or D8718 Thinner
Over 30°C	D8239	D812 or D8719 Slow Thinner

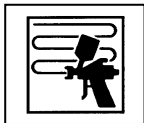


### Application Parameters

DIN 4 @ 20°C      16 – 18 Seconds



Spraygun Sizes      1.2 – 1.3 mm fluid tip  
Gravity gun recommended



Number of Coats      1 Full single coat or \*1 visit application  
Apply to achieve an even finish.  
Do not apply heavy coats..



### Drying Times

Dry to topcoat      15 minutes

### Topcoats

This primer may be overcoated with Deltron Progress UHS direct gloss or Envirobase HP basecoat.

(See the relevant topcoat TDS)

\* 1 light followed by 1 full



## MIXING RATIOS FOR GREYMATIC SHADES

% by weight	G1	G3	G5	G6	G7
D8501	100	75	--	--	--
D8505	--	25	100	48	--
D8507	--	--	--	52	100

## MIXING BY WEIGHT

Where a specific volume of primer is required, this may be best achieved by weight mixing using the guidelines below. The tables show weights for 2/1/0,5 mixing ratios.

<b>WEIGHT ACTIVATION:</b>		<b>2 / 1 / 0.5 MIXING RATIO</b>				
Weights are in grams & cumulative.						
Do not tare the balance between additions.						
Target Paint Volume (L)	0.20 L	0.40 L	0.60 L	0.80 L	1.00 L	
Primer	165	330	495	660	826	
HS Hardeners	222	444	666	887	1109	
Thinner D866 / D807 / D812	248	497	745	993	1242	

<b>WEIGHT ACTIVATION:</b>		<b>2 / 1 / 0.5 MIXING RATIO</b>				
Weights are in grams & cumulative.						
Do not tare the balance between additions.						
Target Paint Volume (L)	0.20 L	0.40 L	0.60 L	0.80 L	1.00 L	
Primer	165	330	495	660	826	
HS Hardeners	222	444	666	887	1109	
D 87** Thinners	245	490	736	981	1226	



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## VOC INFORMATION

The EU limit value for this product (product category: IIB.c) in ready to use form is max. 540g/litre of VOC. The VOC content of this product in ready to use form is max. 540g/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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## 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)

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