



GLOBAL REFINISH
SYSTEM

Product Information

2K Tintable Surfacer Base D825

Product Description

D825 is suitable for the top-quality repair of motor vehicles, which have coloured surfacers as the original equipment. It is also suitable for general-purpose repair work, where its high build and wide colour range can help produce savings in overall material usage.

D825's colour range is achieved by tinting the D825 base with any Global DG colour or tinter. A range of standard colours may be found on the D825 sales brochure (CCP26 & CCP27). Alternatively, the D825 base may be tinted with the Global DG colour that is intended for use as the topcoat.

If applied as a primer surfacer, D825 can be stoved or air-dried before sanding or it may be applied as a wet-on-wet sealer suitable for use with Global DG or BC systems.

Preparation of Substrate



In all cases, wash all surfaces to be painted with soap and water, then apply the appropriate Global cleaner. See GLG-142 Global Cleaners bulletin for selection and usage instructions. Ensure that the substrate is thoroughly cleaned and dried both before and after application work.



Original Paintwork should be sanded using European P280 / U.S. 240 grit discs (dry) or European P360 / U.S. 320 grade paper (wet). Exposed bare metal should be spot-primed with a suitable bare metal primer (see below).



Electrodeposition Primer must be thoroughly cleaned as outlined above and may then be directly overcoated with D825 as a wet-on-wet sealer without abrading. If using D825 as a primer surfacer, abrade the electrodeposition primer as recommended in the "original paintwork" section.

Aluminum, Bare Steel and Galvanized Steel must be clean, rust-free and abraded thoroughly using European P180 / U.S. 180 to European P280 / U.S. 240 grit paper and primed with D831 Chromate-Free Wash Primer after sanding.

Polyester Body Fillers should be dry sanded with European P180 / U.S. 180 followed by European P280 / U.S. 240 grit paper.

Fibre Glass and SMC should be dry sanded using European P280 / U.S. 240 grit paper.

Plastic should be dry sanded with European P600 / U.S. 400 (use a finer grit for softer plastics) and prime first with D820 Plastic Adhesion Promoter. Wash off residue and dry thoroughly before recleaning with appropriate Global substrate cleaner. The use of a tack rag is recommended.

APPLICATION GUIDE

Mix Ratio

When using a published D825 color formulation from Form CCP26 or CCP27:



Primer Surfacer*
 D825 Colour Mix**: 4 Vols
 D802 : 1 Vol
 D-Thinners : 1/2 Vol



Wet-On-Wet Sealer
 D825 Colour Mix**: 6 Vols
 D897 or D884 : 1 Vol
 D-Thinners : 2 Vols

When custom tinting D825 Tintable Surfacer Base with Global DG Colour:



Primer Surfacer*
 D825: 3 Vols
 DG Colour**/Tinter** : 1 Vol
 D802 : 1 Vol
 D-Thinners : 1/2 Vol



Wet-On-Wet Sealer
 D825: 4 Vols
 DG Colour**/Tinter**/D894 : 2 Vol
 D897 or D884 : 1 Vol
 D-Thinners : 2 Vols

* D885 may be added up to 1 oz. per ready-to-spray quart for Primer Surfacer application only.

** In the D825 Colour Mix, the DG Colour or tinter must have a package VOC of 4.60 or less.

Potlife @ 20°C / 68°F:



When Sprayed as a...

<i>Primer Surfacer</i>	1 Hour
<i>Wet-On-Wet Sealer</i>	1 Hour

Thinner

D-Thinner Selection Appropriate Temperature Range:

D870:	Up to 18°C / 65 °F
D871:	18° - 25°C / 65° - 77°F
D872:	25° - 35°C / 77° - 95°F
D873:	Over 35°C / 95°F

Note: D8700 Retarder may be mixed with thinners in temperatures over 35°C / 95°F. The retarder can be mixed up to 10% with the appropriate thinner. Do not use alone as a reducer.

Additives



D8325 can be flexed:

D825 : Ready to spray mix

D814 : 10% by volume

Potlife is 1 hour @ 20°C / 68 °F

Spraygun set up



When Sprayed as a...

<i>Primer Surfacer</i>	1.6 - 1.8 mm or equivalent
<i>Wet-On-Wet Sealer</i>	1.4 - 1.6 mm or equivalent

Spray pressure

<i>HVLP at air cap</i>	0.7 bar / 10 PSI
<i>Conventional at spray gun</i>	3 bar / 45 PSI

Number of coats



When Sprayed as a...

<i>Primer Surfacer</i>	2 to 3 wet coats
<i>Wet-On-Wet Sealer</i>	1 medium coat

	Primer Surfacer	Wet-On-Wet Sealer
<i>Film build per wet coat</i>	100µ / 4.0 mils	75µ / 3.0 mils
<i>Dried film build per coat</i>	37µ / 1.5 mils	25µ / 1.0 mils

APPLICATION GUIDE

Flash off at 20°C / 68°F



Between coats
Before stoving
Before Topcoat

Primer Surfacer

5 – 10 minutes
10 minutes
N/A

Wet-On-Wet Sealer

N/A
N/A
15 minutes minimum, 72 hours maximum
After 72 hrs Wet-On-Wet Sealer must be scuffed.
Over D831, topcoat must be applied within 15 - 45 minutes @ 20°C / 68°F or baked 45 minutes @ 60°C / 140°F or after overnight dry.

Drying times



Dust-free
20°C / 68°F

Primer Surfacer

15 Minutes

Wet-On-Wet Sealer

15 Minutes



Dry to handle
20°C / 68°F

60 Minutes

90 Minutes



Dry to Sand
20°C / 68°F
60°C / 140°F

3 Hours
30 Minutes**

Sand after 2 hours air dry
30 Minutesç



Tape Time
20°C / 68°F
60°C / 140°F
IR (Infrared)
Medium Wave
Short Wave

N/A
N/A

3 hours
45 minutes√

20 Minutes
10 Minutes

5 – 10 Minutes
3 – 5 minutes

** Stoving times are for quoted metal temperature. Additional time should be allowed in the force-drying schedule to allow metal to reach recommended temperature.

Overcoat /Recoat



Dry to Topcoat
20°C / 68°F
60°C / 140°F

Primer Surfacer

3 hours (after sanding)
30 minutes (after sanding)

Wet-On-Wet Sealer

15 minutes
45 minutes



Grade wet
Grade dry
Overcoat with

European P600 / U.S. 400 followed by European P1200 / U.S. 600
European P360 / U.S. 320 followed by European P1000 / U.S. 500
Envirobase or any Global Topcoat

Technical Data

	<u>Primer Surfacer</u>	<u>Wet-On-Wet Sealer</u>
Total dry film build:		
Minimum after sanding	50µ / 2.0 mils	25µ / 1.0 mil
Maximum after sanding	150µ / 6.0 mils	35µ / 1.4 mils
Film build per wet coat	100µ / 4.0 mils	75µ / 3.0 mils
Dried film build per coat	37µ / 1.5. mils	25µ / 1.0. mil
% solids by volume RTS	36.0	36.0
Theoretical coverage	Approx. 144 sq.ft. / US Gal	Approx. . 480 sq.ft. / US Gal

Theoretical coverage in sq.ft./US gal. ready-to-spray (RTS), giving 100µm (4.0 mils) dry film thickness for Primer Surfacer and 30µm (1.2 mils) for Primer Sealer.



VOC

(D825)	496 gms per litre / 4.14 lbs. per US gal.
(D825:D802 Colour Mix: D802: D872, 4:1:1/2)	556 gms per litre / 4.64 lbs. per US gal.
(D825:D802 Colour Mix: D897: D872, 4:1:2)	549 gms per litre / 4.58 lbs. per US gal.
(D825:D802 DG: D802: D872, 3:1:1:1/2)	556 gms per litre / 4.64 lbs. per US gal.
(D825:D802 DG: D897: D872, 4:2:1:2)	551 gms per litre / 4.60 lbs. per US gal.



2K Tintable Surfacer Base

Mix Ratio:

When using a published D825 color formulation from Form CCP26 or CCP27:

<u>Primer Surfacer*</u>		<u>Wet-On-Wet Sealer</u>	
	D825 Colour Mix**: 4 Vols D802 : 1 Vol D-Thinners : 1/2 Vol		D825 Colour Mix**: 6 Vols D897 or D884 : 1 Vol D-Thinners : 2 Vols

When custom tinting D825 Tintable Surfacer Base with Global DG Colour:

<u>Primer Surfacer*</u>		<u>Wet-On-Wet Sealer</u>	
	D825: 3 Vols DG Colour**/Tinter**: 1 Vol D802 : 1 Vol D-Thinners : 1/2 Vol		D825: 4 Vols DG Colour**/Tinter**/D894 : 2 Vol D897 or D884 : 1 Vol D-Thinners : 2 Vols

* D885 may be added up to 1 oz. per ready-to-spray quart for Primer Surfacer application only.

** In the D825 Colour Mix, the DG Colour or tinter must have a package VOC of 4.60 or less.

Pot life:

as a Primer Surfacer	1 Hour
as a Wet-On-Wet Sealer	1 Hour



Thinner:

<u>D-Thinner Selection</u>	<u>Appropriate Temperature Range:</u>
D870:	Up to 18°C / 65 °F
D871:	18° - 25°C / 65° - 77°F
D872:	25° - 35°C / 77° - 95°F
D873:	Over 35°C / 95°F

Note: D8700 Retarder may be mixed with thinners in temperatures over 35°C / 95°F. The retarder can be mixed up to 10% with the appropriate thinner. Do not use alone as a reducer.

Additives:



<i>Can be flexed:</i>	D825 : Ready to spray mix	<i>Potlife is 1 hour @ 20°C / 68 °F</i>
	D814 : 10% by volume	

Air Pressure:



<i>HVLP at air cap</i>	0.7 bar / 10 PSI
<i>Conventional at spray gun</i>	3 bar / 45 PSI
<i>Fluid Tip</i>	
as a Primer Surfacer	1.6 - 1.8 mm or equivalent
as a Wet-On-Wet Sealer	1.4 - 1.6 mm or equivalent

Application:



	<u>Primer Surfacer</u>	<u>Wet-On-Wet Sealer</u>
<i>Apply</i>	2 – 3 wet coats	1 medium coat
<i>Between coats</i>	5 – 10 minutes	N/A
<i>Film build per wet coat</i>	100µ / 4.0 mils	75µ / 3.0 mils
<i>Dried film build per coat</i>	37µ / 1.5 mils	25µ / 1.0 mils

Dry Times:



<i>Before Stoving</i>	10 minutes	N/A
<i>Dust-free 20°C / 68°F</i>	15 minutes	15 minutes
<i>Dry to Handle 20°C / 68°F</i>	90 minutes	90 minutes



<i>Dry to Sand</i>	3 hours	2 hours
20°C / 68°F		
60°C / 140°F	30 minutes**	30 minutes**



<i>Tape Time</i>	N/A	3 hours
20°C / 68°F		
60°C / 140°F	N/A	45 minutes**



<i>IR (Infrared)</i>		
Medium Wave	20 minutes	5 – 10 minutes
Short Wave	10 minutes	3 – 5 minutes



<i>Dry to Topcoat</i>		
20°C / 68°F	3 Hours (after sanding)	15 minutes
60°C / 140°F	30 minutes (after sanding)**	45 minutes**

** Stoving times are for quoted metal temperature. Additional time should be allowed in the force-drying schedule to allow metal to reach recommended temperature.

Product Compatibility

D825 is compatible as a primer surfacer over:

D820 Plastic Adhesion Promoter D831 Chromate Free Wash Primer SX/SXA 1050 Plastic Adhesion Promoter
(Specialty Performance Products)

D825 as a primer surfacer may be sealed with:

D822 Corrosion Resistant Primer (as a sealer) D848 Waterborne 2K Primer Surfacer (as a sealer) D8006 UHS Sealer
D825 2K Tintable Surfacer (as a sealer) D859 Low VOC Sealer D8040 Series DTM (as a sealer)
D839 2K Primer Surfacer/Sealer (as a sealer) D891 Sealer D8070 series 2K Chromatic Sealers
SX1056 Flexible 2K Sealer
(Specialty Performance Products)

D825 is compatible as a sealer over:

D820 Plastic Adhesion Promoter D848 Waterborne 2K Primer Surfacer Sealer* SX/SXA 1050 Plastic Adhesion Promoter
(Specialty Performance Products)
D822 Corrosion Resistant Primer* D8002 UHS Surfacer* SX1057 Flexible 2K Surfacer*
(Specialty Performance Products)
D824 Prime-Fill Low VOC 2K Surfacer* D860 Low VOC Primer Surfacer* D831 Chromate Free Wash Primer** SX1060 Brushable 2K Primer Surfacer*
(Specialty Performance Products)
D825 2K Tintable Surfacer* DTM Uniprime® Direct to Metal Primer Surfacer* D839 2K Primer Surfacer / Sealer*

**Multiple coat surfacer applications only. Must be fully cured and sanded.*

***Over D831, sealer applications must be topcoated wet on wet within 15-45 minutes at 68°F or allowed to cure overnight or baked 45 minutes at 140°F.*

D825 may be topcoated with:

Global DG Direct Gloss Colour Global BC Basecoat Colour DGLV Direct Gloss Low VOC Colour Envirobase

Performance Guidelines

The use of HVLP spray equipment can give an increase in transfer efficiency of around 10% depending upon the make and model of equipment used.

When **spot priming** with D825 as a Primer Surfacer, adopt the following procedure:

- Ensure that the surface is thoroughly sanded to the panels' edge or to a distance several centimeters beyond the damaged area, whichever is the smaller.
- After applying the material and allowing it to dry as normal, be careful to thoroughly level the repair edge when sanding.
- Do not attempt spot repair on original or refinish thermoplastic applications, lacquer or 1K finishes.
- D825 and its ancillaries are sensitive to moisture, so all equipment must be perfectly dry.
- Partially used cans of hardener must be carefully closed.

Health and Safety:



See Material Safety Data Sheet and Labels for additional safety information and handling instructions.

- The contents of this package may have to be blended with other components before the product can be used. Before opening the packages, be sure you understand the warning messages on the labels and MSDS's of all the components, since the mixture will have the hazards of all its parts.
- Improper handling and use, for example, poor spray technique, inadequate engineering controls and/or lack of proper Personal Protective Equipment (PPE), may result in hazardous conditions or injury.
- Follow spray equipment manufacturer's instructions to prevent personal injury or fire.
- Provide adequate ventilation for health and fire hazard control.
- Follow company policy, product MSDS and respirator manufacturer's recommendations for selection and proper use of respiratory protection. Be sure employees are adequately trained on the safe use of respirators per company and regulatory requirements.
- Wear appropriate PPE such as eye and skin protection. In the event of injury, see first aid procedures on MSDS.
- Always observe all applicable precautions and follow good safety and hygiene practices.

Emergency Medical or Spill Control Information (304) 843-1300; In Canada (514) 645-1320

Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the general public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to PPG Industries. Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results, or fitness for any intended use, nor does PPG Industries warrant freedom from patent infringement in the use of any formula or process set forth herein.

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