

## 2K Primer Surfacer/Sealer

EU-36

# D839



GLOBAL REFINISH  
SYSTEM™

### Product Description:

GLOBAL REFINISH SYSTEM™ D839 2K Primer Surfacer/Sealer is a gray 2K primer surfacer suitable for a wide range of day-to-day repair work in the refinish collision center. Versatile, quickly drying and easy to apply and sand, it offers excellent adhesion, film build, surface levelling and gloss holdout over a wide range of substrates.

D839 may be applied directly to sound original paintwork, polyester body fillers and suitable adhesion primers. It may be directly over coated with *Global Refinish System* BC or CONCEPT® DCC Acrylic Urethane, or ENVIROBASE® High Performance.

D839 can be applied as a conventional spray filler, primer surfacer or sealer. It may be air-dried, low baked or IR cured.

### Preparation of Substrate:



- In all cases, wash with soap and water, then use the appropriate *Global Refinish System* cleaner. See GLG-142 *Global Refinish System* Cleaners bulletin for selection and usage instructions. Ensure that the substrate is thoroughly cleaned and dried both before and after preparation.
- **Original Paintwork** should be sanded using European P280 / US 240 grit discs (dry) or European P360 / US 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 outline above and then may be directly overcoated with D839 as a Wet-on-Wet sealer without abrading. If using D839 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-P280 / US 180-240 grit paper and primed with an appropriate PPG etch primer after sanding.
- **Polyester Body Fillers** should be dry sanded using European P180 / US 180 grit paper followed by European P280 / US 240 grit paper.
- **Fibre Glass and SMC** should be dry sanded using European P280 / US 240 grit paper.
- **Plastic** should be dry sanded with European P600 / US 400 grit paper (use a finer grit for softer plastics) and prime first with a plastic adhesion promoter. Wash off residue and dry thoroughly before recleaning with appropriate *Global Refinish System* substrate cleaner. The use of a tack rag is recommended.

### Required Products

#### Hardener

D802 Hardener  
D884 High Solids Hardener  
D897 High Solids Hardener

#### Thinner

D870 Fast Thinner - up to 65°F (18°C)  
D871 Medium Thinner 65-77°F (18-25°C)  
D872 Slow Thinner 77-95°F (25-35°C)  
D873 Very Slow Thinner 95°F (35°C) and over

## D839

## Mix Ratio:

**Spray Filler**Optimum Film Build

D839: 4 vols.  
D802: 1 vol.

**Primer Surfacer\***Optimum Drying Speed

D839: 4 vols.  
D802: 1 vol.  
D Series Thinner: ½ vol.

**Wet-on-Wet Sealer**

D839: 4 vols.  
D894/DMC Tinter\*\*: 2 vols.  
D884/D897: 1 vol.  
D Series Thinner: 2 vol.

\*SL87 Extender may be added up to 1 oz. per RTS quart if desired.

\*\*The DMC Tint must have a package VOC of 4.60 or less.

**Note:** Spray Filler and Primer Surfacer applications **must** be sanded.

## Pot Life:



15 minutes at 68°F (20°C) for Spray Filler  
1 hour at 68°F (20°C) for Primer Surfacer  
1 hour at 68°F (20°C) for Wet-on-Wet Sealer

## Additives:



**DMC Tinter:** In the 4:1 or 4:1½ option, D839 may be tinted by addition of up to 10% by volume of DMC tinter or mixed *Concept* DCC Colour PRIOR to addition of D802 Hardener and the thinner.

**D814 Plasticiser:** 10% by volume to RTS D839 (D839 as a Primer Surfacer or as a Wet-on-Wet Sealer may be plasticised)

**SL814 Universal Flexibilizer:** 10% by volume to RTS D839 (D839 as a Primer Surfacer or as a Wet-on-Wet Sealer may be plasticised)

## Spraygun Setup:



<b>Fluid Tip:</b>	Spray Filler	1.6-1.8 mm or equivalent
	Primer Surfacer	1.6-1.8 mm or equivalent
	Wet-on-Wet Sealer	1.4-1.6 mm or equivalent

## Spray Pressure:

**HVLP:** 0.7 bar / 10 psi at the air cap  
**Compliant:** 29-40 psi at the gun

*Note: For best overall results, refer to spraygun manufacturer's recommendations for inlet air pressures.*

## Number of Coats:



<b>Apply:</b>	Spray Filler	up to 4 wet coats
	Primer Surfacer	2 to 3 wet coats
	Wet-on-Wet Sealer	1 medium coat

	<b><u>Spray Filler</u></b>	<b><u>Primer Surfacer</u></b>	<b><u>Wet-on-Wet Sealer</u></b>
<b>Apply:</b>	up to 4 wet coats	2-3 wet coats	1 medium wet coat
<b>Total dry film build per coat:</b>	2.0 mils / 50 µ	1.5 mils / 37 µ	1.0 mils / 25 µ

## D839

## Drying Times

**Flash Off:**

*Between Coats*  
*Before Stoving*  
*Before Topcoat*

**Spray Filler**

5-10 minutes  
 N/A  
 N/A

**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 hours Wet-on-Wet Sealer must be scuffed.

**Dust Free:**

68°F (20°C)

15 minutes

15 minutes

15 minutes

**Dry to Sand:**

68°F (20°C)  
 140°F (60°C)

4 hours  
 Do not force dry

2 hours  
 30 minutes\*\*

Sand after 2 hours  
 30 minutes\*\*

**Tape Time:**

68°F (20°C)  
 140°F (60°C)

N/A  
 N/A

N/A  
 N/A

3 hours  
 45 minutes\*\*

**IR:**

Medium wave:  
 Short wave:

Do not force dry  
 Do not force dry

20 minutes  
 10 minutes

5-10 minutes  
 3-5 minutes

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

**Overcoat/Recoat:****Dry to Topcoat**

68°F (20°C)  
 140°F (60°C)

**Spray Filler**

4 hours (after sanding)  
 N/A

**Primer Surfacer**

2 hours (after sanding)  
 15 minutes

**Wet-on-Wet Sealer**

15 minutes  
 45 minutes



**Grade Wet:**  
**Grade Dry:**

European P600 / US 400 followed by European P1200 / US600  
 European P360 / US 320 followed by European P1000 / US500

**Overcoat with:**

Global Refinish System, Concept DCC Acrylic Urethane or ENVIROBASE®  
 High Performance topcoats.

**Technical Data**

*Minimum after sanding:*  
*Maximum after sanding:*  
*Film build per wet coat:*  
*Film build per dry coat:*

**Spray Filler**

2.0 mils / 50 μ  
 10.0 mils / 250 μ  
 5.0 mils / 125 μ  
 2.0 mils / 50 μ

**Primer Surfacer**

2.0 mils / 50 μ  
 6.0 mils / 150 μ  
 4.0 mils / 100 μ  
 1.5 mils / 37 μ

**Wet-on-Wet Sealer**

1.0 mils / 25 μ  
 1.4 mils / 37 μ  
 3.0 mils / 75 μ  
 2.0 mils / 25 μ

## D839

## Technical Data:

RTS Combinations	D839 : D802	D839 : D802 : D872	D839 : DMC: D897 : D872
Volume Ratio	4 : 1	4 : 1 : ½	4 : 2 : 1 : 2
VOC Actual g/L	516	544	550
VOC Actual lbs./ US gal	4.30	4.54	4.60
VOC Regulatory (less water less exempts) g/L	516	544	550
VOC Regulatory (less water less exempts) lbs./ US gal	4.30	4.54	4.60
Solids vol. %	40.9	37.2	35.9
Solids wt. %	64.1	60.6	54.7
Theoretical Coverage - Sq. Ft. / US gal.	109	149	480

*Theoretical coverage in sq.ft./US gal RTS giving 6.0 mils (150 µ) dry film thickness for spray filler, 4 mils (100 µ) dry film thickness for Primer Surfacer and 1.2 mils (30 µ) for primer sealer.*

## Product

## Compatibility:

**D839 is compatible as a spray filler and primer surfacer over:**

D820 Plastic Adhesion Promoter      ONECHOICE® Plastic Adhesion Promoters      OneChoice Etch Primers

**D839 as a spray filler or primer surfacer may be sealed with:**

Global Refinish System Sealers      OneChoice Sealers

**D839 is compatible as a sealer over:**

Global Refinish System      OneChoice Plastic Adhesion      OneChoice Etch Primers  
 Surfacer/D820 Plastic Adhesion Promoters  
 Promoter      OneChoice Surfacer  
 D822 Corrosion Resistant Primer

**D839 may be topcoated with:**

Global Refinish System BC Basecoat Colour  
 Concept DCC Acrylic Urethane  
 Envirobase High Performance

## Performance Guidelines

The use of HVLP spray equipment can give an increase in transfer efficiency of about 10% depending on the make and model of equipment used. When **Spot Priming** with D839 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 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.
- D839 and its ancillaries are sensitive to moisture, so all equipment must be perfectly dry.
- Partially used cans of hardener must be carefully closed.

## D839

**Health and Safety:**

See 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 SDS's of all the components, since the mixture will have the hazards of all of 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 SDS 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 SDS.
- Always observe all applicable precautions and follow good safety and hygiene practices.

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

**Important:** The contents of this package must 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 of all components since the mixture will have the hazards of all its parts. Improper spray technique may result in a hazardous condition. Follow spray equipment manufacturer's instructions to prevent personal injury or fire. Follow directions for respirator use. Wear eye and skin protection. Observe all applicable precautions.

**EMERGENCY MEDICAL OR SPILL CONTROL INFORMATION (412) 434-4515; 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 public. Products mentioned may be hazardous and should only be used according to direction, 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.

PPG Automotive Refinish  
19699 Progress Drive  
Strongsville, OH 44149  
800.647.6050

PPG Canada Inc.  
2301 Royal Windsor Drive, Unit #6  
Mississauga, Ontario L5J 1K5  
888.310.4762

Follow us online:



[www.ppgrefinish.com](http://www.ppgrefinish.com)















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## 2K Primer Surfacer/Sealer

Mix:	<b>Spray Filler</b> <i>(Optimum Film Build)</i>		<b>Primer Surfacer*</b> <i>(Optimum Drying Speed)</i>		
		D839 2K Primer Surfacer/Sealer: 4 vols. D802 Hardener: 1 vol.		D839 2K Primer Surfacer/Sealer: 4 vols. D802 Hardener: 1 vol. D-Thinner: ½ vol.	
	<b>Wet-on-Wet Sealer</b>				
		D839 2K Primer Surfacer/Sealer: 4 vols. D894 / DMC Tinter: 2 vol. D884 /D897 Hardener: 1 vols. D-Thinner: 2 vols.			
	<i>*SL87 Extender may be added up to 1 oz. per RTS quart if desired. **The DMC Tint must have a package VOC of 4.60 or less.</i>				
	<b>Hardener</b>		<b>Thinner</b>		
	D802	Hardener	D870	Fast Thinner - up to 65°F (18°C)	
	D884	High Solids Hardener	D871	Medium Thinner 65-77°F (18-25°C)	
	D897	High Solids Hardener	D872	Slow Thinner 77-95°F (25-35°C)	
			D873	Very Slow Thinner 95°F (35°C) and over	
Additives:		<b>DMC Tinter:</b> In the 4:1 or 4:1½ option, D839 may be tinted by addition of up to 10% by volume of DMC tinter or mixed <i>Concept</i> DCC Colour PRIOR to addition of D802 Hardener and the thinner.			
		<b>D814 Plasticiser:</b> 10% by volume to RTS D839 <i>(D839 as a Primer Surfacer or as a Wet-on-Wet Sealer may be plasticised)</i>			
		<b>SL814 Flexibilizer:</b> 10% by volume to RTS D839 <i>(D839 as a Primer Surfacer or as a Wet-on-Wet Sealer may be flexibilized)</i>			
Pot Life:		15 minutes at 68F (20°C) for Spray Filler 1 hour at 68°F (20°C) for Primer Surfacer 1 hour at 68°F (20°C) for Wet-on-Wet Sealer			
Gun Setup:		<b>Fluid Tip:</b>	<b>Spray Filler</b> 1.6-1.8 mm or equivalent	<b>Primer Surfacer</b> 1.6-1.8 mm or equivalent	<b>Wet-on-Wet Sealer</b> 1.4-1.6 mm or equivalent
		<b>HVLP:</b>	0.7 bar / 10 psi at the air cap		
		<b>Compliant:</b>	29-40 psi at the gun		
Application:		<b>Apply:</b>	up to 4 wet coats	2 to 3 wet coats	1 medium coat
		<b>Total dry film build per coat:</b>	2.0 mils / 50 µ	1.5 mils / 37 µ	1.0 mils / 25 µ
Dry Times:		<b>Between Coats</b>	5-10 minutes	5-10 minutes	N/A
		<b>Before Stoving</b>	N/A	10 minutes	N/A
		<b>Before Topcoat</b>	N/A	N/A	15 minutes minimum 72 hours maximum
		<b>Dry to Sand:</b>			
		68°F (20°C)	4 hours	2 hours	Sand after 2 hours
		140°F (60°C)	Do not force dry	30 minutes**	30 minutes**
		<b>Tape Time:</b>			
		68°F (20°C)	N/A	N/A	3 hours
		140°F (60°C)	N/A	N/A	45 minutes**
		<b>IR:</b>			
		Medium wave:	Do not force dry	20 minutes	5-10 minutes
		Short wave:	Do not force dry	10 minutes	3-5 minutes
		<b>Dry to Topcoat</b>			
		68°F (20°C)	4 hours (after sanding)	2 hours (after sanding)	15 minutes
		140°F (60°C)	N/A	15 minutes	45 minutes
		<b>Grade Wet:</b>	US 400 / P600 grit		
		<b>Grade Dry Machine:</b>	US 320 / P500 grit		

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