



GLOBAL REFINISH
SYSTEM

Product Information

DG Direct Gloss Color

Product Description

Global Refinish System DG is a high-performance two-pack acrylic urethane topcoat designed for the direct gloss repair and refinishing of cars and commercial vehicles.

The performance of Global Refinish System DG in a recommended Global repair system meets or exceeds motor manufacturer warranty requirements and the Global Refinish System carries many OEM approvals.

Preparation of Substrate



Apply over original baked finishes or over recommended Global primers.



In all cases, wash all surfaces to be painted with soap and water and then apply the appropriate Global cleaner. See EU134 Global Cleaners bulletin for selection and usage instructions. Ensure that the substrate is thoroughly cleaned and dried both before and after application work.



Apply DG Colour after wet sanding with U.S. 400 – 500 / European P600 – 800 grade paper or dry sanding with U.S. 360 – 400 / European P400 – 600 grade paper.

Wash off residues and dry thoroughly before recleaning with appropriate Global substrate cleaner. The use of a tack rag is recommended.

APPLICATION GUIDE:

Mix Ratio:



DG Color: 4 vols
Hardener: 1 vol
Thinner: 2 vols



Potlife: 1 - 3 hours @ 68°F / 20°C

Note: D885 or D886 can be added to DG Colour if necessary (see additives section below).

Use the below chart to choose a Hardener and Thinner according to the application temperature:

Hardener Selection	Thinner Selection
D884 Air Dry / General Purpose	D870 Up to 65°F / 18°C
D887 Stoving / Mar Resistance	D871 65° – 77°F / 18° – 25°C
	D872 77° – 95°F / 25° – 35°C
	D873 Over 95°F / 35°C
	D8700 May replace up to 25% of D873 in very hot conditions

For exceptional conditions of temperature and humidity (>95°F / 35°C and >70%) the use of D8700 Retarder, D873 Very Slow Thinner and/or D886 Extender are recommended.

Additives:



D814 Plasticiser Mix at 2 : 1 : 1 : 1 (DG: Hardener: D Thinner: D814)

D885 Enhancer To enhance cure, add 1/2 – 1 oz. per (RTS) U.S. quart.

D886 Extender To extend flow, add 1/2 oz. per (RTS) U.S. quart.

See EU47 for further information on D814 Plasticiser.

Note: *The addition of additives will affect the VOC level.*

Spraygun set-up:



Fluid tip 1.4 – 1.6 mm or equivalent

Spray Viscosity 18 – 22 ZAHN #2 @ 68°F / 20°C

Spray pressure

HVLP 10 PSI (at air cap)

Conventional 45 – 55 PSI (at spray gun)

Number of coats:



Apply 2 coats or to hiding

Film Build Per Wet Coat 3.0 – 3.7 mils

Dried Film Build Per Coat 1.1 – 1.3 mils

Flash off at 68°F / 20°C:



Between coats 10 minutes

Before stoving 0 – 10 minutes

APPLICATION GUIDE

Drying times:



Dust Free
68°F / 20°C 30 – 50 minutes



Tack Free
68°F / 20°C 2 – 3½ hours



Tape Time
68°F / 20°C 8 – 10 hours
140°F / 60°C 30 minutes



Air dry
68°F / 20°C 20 hours
140°F / 60°C 30 minutes



IR (Infrared)
Medium Wave 10 – 15 minutes depending on color.
Short Wave 8 minutes depending on color

Note: Stoving times are for quoted metal temperatures. Additional time should be allowed in the stoving schedule to allow metal to reach recommended temperature.

Overcoat / Recoat:



Recoat with DG After 8 hours minimum @ 68°F / 20°C or after surface has cooled if stoved.

Last coat w/clear Global Clears may be added to the last coat provided that they are mixed with the same hardeners and thinners used in the DG colour.



Sanding Sanding is essential before recoating for good adhesion

Grade wet U.S. 500 \ European P800
Grade dry U.S. 500 \ European P800



Overcoat With any Global primers, topcoats or clearcoats.
Global clearcoats can be applied after a minimum 2 hours dry

Performance Guidelines:

After spot repairing, clean the gun and then **D8753 Blend-Ease Universal Blending Solvent** (See EU136 for instructions) around the repaired area to lose the edge or blend the repair into the surrounding panel. Spray starting from the outside of the repair, moving to the center.

The use of HVLP spray equipment can increase transfer efficiency by about 10% depending on the make and model of equipment used.

Recoating times will be extended at lower temperatures.

Global Refinish System DG may be sanded with 1200 grit paper or finer and polished when hard, to rectify minor imperfections.

Technical Data:

Total dry film build:

Minimum 2 mils

Maximum 2.5 mils

Theoretical coverage: 264 – 321 sq.ft. per U.S. gal.

Theoretical coverage in US gal. ready-to-spray (RTS), giving 2 mils dry film thickness.

Percent solids by volume RTS: 32.9 – 40.0

VOC

DG Color 3.8 – 4.7 lbs. per U.S. gallon

DG: D884: D872 (4:1:2) 4.4 – 5.0 lbs. per U.S. gallon

DG: D887: D872 (4:1:2) 4.4 – 5.0 lbs. per U.S. gallon

Direct Gloss Color

Mix Ratio:



DG Color: 4 vols

Hardener: 1 vol

Thinner: 2 vols

Potlife: 1 - 3 hours @ 68°F / 20°

Note: D885 or D886 can be added to DG Colour if necessary (see additives section below).

Hardener Selection		Thinner Selection	
D884	Air Dry / General Purpose	D870	Up to 65°F / 18°C
D887	Stoving / Mar Resistance	D871	65° - 77°F / 18° - 25°C
		D872	77° - 95°F / 25° - 35°C
		D873	Over 95°F / 35°C
		D8700	May replace up to 25% of D873 in very hot conditions

For exceptional conditions of temperature and humidity (>95°F / 35°C and >70%) the use of D8700 Retarder, D873 Very Slow Thinner and/or D886 Extender are recommended.

Additives:



D814 Plasticiser

Mix at 2 : 1 : 1 : 1 (DG: Hardener: D Thinner: D814)

D885 Enhancer

To enhance cure, add 1/2 - 1 oz. per (RTS) U.S. quart.

D886 Extender

To extend flow, add 1/2 oz. per (RTS) U.S. quart.

See EU47 for further information on D814 Plasticiser.

Note: The addition of additives will affect the VOC level.

Air Pressure:



HVLP

10 PSI (at air cap)

Conventional

45 - 55 PSI (at spray gun)

Application:



Apply

2 coats or to hiding

Between coats

10 minutes

Before stoving

0 - 10 minutes

Drying times:



Dust Free

68°F / 20°C

30 - 50 minutes

Tack Free

68°F / 20°C

2 - 3 1/2 hours



Tape Time

68°F / 20°C

8 - 10 hours

140°F / 60°C

30 minutes



Air dry

68°F / 20°C

20 hours

140°F / 60°C

30 minutes



IR (Infrared)

Medium Wave

10 - 15 minutes depending on color.

Short Wave

8 minutes depending on color

Note: Stoving times are for quoted metal temperatures. Additional time should be allowed in the stoving schedule to allow metal to reach recommended temperature.

Health and Safety:

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



- Before opening the package, be sure all the warning messages on the label and MSDS are understood.
- 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.

PPG Industries
19699 Progress Drive
Strongsville, OH 44149

PPG Canada Inc.
2301 Royal Windsor Drive
Mississauga, Ontario L5J 1K5