



GLOBAL REFINISH
SYSTEM

Product Information

D8170 Performance LV Clearcoat

Product Description

D8170 Performance LV Clearcoat is a 2 pack high productivity clear with a sprayable VOC of 2.1 lbs. per gallon. It provides speed and versatility, can be polished quickly and will meet the limits of the most stringent VOC markets in Southern California.

D8170 is designed for use over Global BC (see data sheet EU-02) and Envirobase HP Waterborne Basecoats (see data sheet EU-143).

Preparation of Substrate



In all cases, wash all surfaces to be painted with soap and water, then apply the appropriate Global cleaner. See EU-134 Global Cleaners bulletin for selection and usage instructions. Ensure that the substrate is thoroughly cleaned and dried both before and after application work.



Wet sand with U.S. 500 – 600 / European P800 – 1200 grade paper or dry sanding with U.S. 400 – 500 / European P600 – 800 grade paper.



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

Apply D8170 Performance LV Clearcoat over Global BC and Envirobase HP. See the product data sheet for details on Global BC & Envirobase High Performance system applications.

APPLICATION GUIDE:

Mix Ratio for D8170 Performance LV Clearcoat



D8170 : 3 vols

D827x : 1 vol

D8767 : 1 vol



Potlife @ 68°F / 20°C:

1.5 hours for standard and medium sized repairs

1 hour for panel and spot repairs (D8272 Hardener)

Use the tables to determine the proper hardener and thinner needed for your application.

Hardener Selection:

D8272:* Performance LV Express Hardener
55° - 70°F (13° - 21°C)

D8273 : Performance LV Fast Hardener
70° - 85°F (21° - 29°C)

D8274: Performance LV Medium Hardener
85° - 95°F (29° - 35°C)

D8275: Performance LV Slow Hardener
95°F (35°C) and above

**More applicable for small parts*

Hardener selection may be dependent on the size of the repair.

Thinner Selection:

D8767

Additives:



SLV814 Plasticiser may be used to flexibilize D8170 Clear.

D8170: 2 vols

D827x: 1 vol

D8767: 1 vol

SLV814: 1 vol

Spraygun set-up:



Fluid Tip

1.3 – 1.5 mm or equivalent

Spray Viscosity

18 – 20 seconds Zahn #2

Spray pressure:

HVLP at air cap

8 – 10 psi at the air cap

Conventional at spray gun

45 – 55 psi at the gun

Refer to the manufacturers gun recommendations for air pressure.

Number of coats:



Apply:

2 wet coats

Film build per wet coat

2.69 – 3.18 mils

Dried film build per coat

1.1 – 1.3 mils

Flash off at 68°F / 20°C:



Between coats

2 – 10 minutes

Before baking

No purge necessary

APPLICATION GUIDE

Drying times:



Dust-free

68°F / 20°C

20 – 40 minutes

Dry to handle

68°F / 20°C

3 – 4 hours minimum



Air Dry

68°F / 20°C

8 hours



*Force Dry (Metal Temperature)**

140°F / 60°C

When using D8272 - 15 minutes

When using D8273, D8274 and D8275 - 20 minutes

Tape Time

68°F / 20°C

6 – 8 hours



IR (Infrared)

Medium Wave

5 minutes 1/2 bake

9 minutes full bake

Short Wave

5 minutes

*** All force dry times are quoted for metal temperature. Additional time must be allowed during force dry to allow metal to reach recommended temperature.**

Overcoat/Recoat:



Overcoat/Recoat Time

16 hours at 68°F / 20°C or after force dry/cool down.

D8170 must be sanded before recoating with primer, color or clear.



Grade wet

U.S. 500 – 600 / European P800 – 1200

Grade dry

U.S. 400 – 500 / European P600 – 800



Overcoat with

Any Global topcoat system



Polishing

Polishing is not normally required. If, however, polishing is required to remove minor dirt nibs, wet sand with P1500 wet and follow normal polishing procedures.

Performance Guidelines:

Allow the Envirobase HP Waterborne Basecoat or Global BC to flash off for 15 minutes (but no longer than 24 hours) before applying D8170 Clear. The timing will depend on thickness and temperature.

Recoating times will be extended at lower temperatures. Global D8170 may be sanded with 1200 grit paper or finer and polished when hard, to rectify minor imperfections.

Fading Out - D8170 Clear

After spot repairing, clean the gun and then spray D8753 Universal Blending Solvent around the repaired area to lose the edge and blend the repair into the surrounding panel. Spray starting from the outside of the repair, moving to the center.

Technical Data:

Total dry film build

Minimum	2.0 mils
Maximum	4.0 mils
Recommended film build per wet coat	2.69 – 3.18 mils
Recommended dried film build per coat	1.1 – 1.3 mils

Technical Data continued:

RTS Combinations:	D8170 : D827x : D8767	D8170 : D827x + D8767 : SLV814
Volume Ratio:	3 : 1 : 1	2 : 1 : 1 : 1
Applicable Use Category	Clear Coating	Flexed Clear Coating
VOC Actual (g/l)	129	104
VOC Actual (lbs/gal)	1.08	0.86
VOC Regulatory (less water less exempt) (g/l)	248	213
VOC Regulatory (less water less exempt) (lbs/gal)	2.07	1.78
Density (g/l)	1190	1203
Density (lbs/gal)	9.93	10.04
Volatiles wt. %	64.9	66.0
Water wt. %	0.0	0.0
Exempt wt. %	54.1	57.4
Water vol. %	0.0	0.0
Exempt vol. %	47.9	51.4
Solids vol. %	36.9	36.5
Sq. Ft. Coverage / U.S. gal. 1 mil. @ 100% transfer efficiency	592	585

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 (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 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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PPG Industries
19699 Progress Drive
Strongsville, OH 44149
1-800-647-6050

PPG Canada Inc.
2301 Royal Windsor Drive
Mississauga, Ontario L5J 1K5
1-888-310-4762