



GLOBAL REFINISH
SYSTEM

Product Information

D890 Compliant Clear

Product Description

Global Refinish System D890 is a premium, compliant clear formulated to meet VOC limits similar to those currently in place in Northern California. D890 is designed for use over Global BC Color (see Data Sheet EU02) and Envirobase (See data sheet EU130).

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 D890 Compliant Clear over Global BC and Envirobase. See the product data sheet for details on Global BC & Envirobase system applications.

APPLICATION GUIDE

Mixing Ratio:



D890	3 vols
D884 or D887	1 vol
Thinner	1/2 vol
+ D885 or D886	1/2 - 1 oz. per ready-to-spray quart

The addition of D885 or D886 is required to maintain pot life. Add 1/2 - 1 U.S. fl. oz. per ready-to-spray (RTS) U.S. quart of D885 for enhanced cure or D886 to extend flow in higher temperatures.



Pot life @ 68°F / 20°C 1 hour (Adding D885 or D886 is required to maintain pot life.)

Choose Hardener and Thinner according to the below charts:

Hardener Selection

D884	General Purpose / Baking
D887	Baking / Flexible Parts

Thinner Selection

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

Note: Use of D887 is required for flexible parts, on or off the vehicle. No other additive is necessary.

Note: D8700 Retarder may be mixed with thinners in temperatures over 35°C / 95°F. The retarder can be mixed up to 25% with the appropriate thinner. Do not use alone as a reducer.

Additives:



D885 Enhancer
D886 Extender

Add 1/2 – 1 U.S. fl. oz. per ready to-spray (RTS) U.S. quart of D885 for enhanced cure or D886 to extend flow in higher temperatures (required to maintain pot life).

Spraygun set-up:



Fluid Tip
Spray Viscosity

1.3 – 1.5 mm or equivalent
20 – 21 seconds #2 ZAHN (Signature type @ 68°F / 20°C)

Spray pressure:

HVLP at air cap	10 PSI
Conventional at spray gun	45 - 55 PSI

Number of coats:



Apply 2 coats

1 full wet coat with decreased fluid volume followed by,
1 full wet coat with normal fluid volume
(See "Performance Guidelines", page 3)

Flash off at 68°F / 20°C:



Between coats	5 – 10 minutes
Before baking	0 – 15 minutes

Drying times:

(Dry times using D884 Hardener and D885 Enhancer)



Dust-free 68°F / 20°C	30 – 45 minutes
Dry to handle 68°F / 20°C	4 hours minimum



Tape Time 68°F / 20°C	8 hours
140°F / 60°C	1 hour after cool down

APPLICATION GUIDE

Drying Times (continued):



Air Dry

68°F / 20°C
140°F / 60°C

8 hours
30 minutes



IR (infrared)

Medium Wave
Short Wave

15 minutes
9 minutes



Polishing

After bake cycle and 1 hour cool down. Use a foam pad with a minor cutting compound to remove any minor imperfections.

Overcoat / Recoat:



Overcoat/Recoat Time

After force dry/cool down or 6 – 8 hours @ 68°F / 20°C



D890 must be sanded before recoating to ensure good adhesion

Grade wet

European U.S. 500 – 600 / P800 – 1200

Grade dry

European U.S. 400 – 500 / P600 – 800



Overcoat with

Any Global topcoat system

Performance Guidelines:

Allow the Global BC Color to flash off for 15 minutes (but no longer than 24 hours) before applying D890 Clear. The timing will depend on thickness and temperature.

Adjust the fluid volume on the gun lower before applying the first coat of D890. Spray the coat to look as you want the final appearance to look. Apply the second coat with normal fluid volume to achieve the same appearance.

Recoating times will be extended at lower temperatures. Global D890 may be sanded with 1200 grit paper or finer and polished when hard, to rectify minor imperfections.

Fading Out - D890 Clear

After spot repairing, clean the gun and then spray D8753 Blend-Ease 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	3.0 mils
Recommended film build per wet coat	2.3 – 2.7 mils
Recommended dried film build per coat	1.2 – 1.4 mils

Theoretical coverage 820 sq.ft. per U.S. gal.

Theoretical coverage in sq.ft./U.S. gal. Ready-to-spray (RTS), 1 mil dry film thickness

Percent solids by volume RTS 51.16

VOC

(D890)	3.34 lbs. per U.S. gal.
(D890:D887:D872 + D886, 3:1:1/2 + 1 oz./RTS U.S. quart)	3.47 lbs. per U.S. gal.

Compliant Clear

Mix:



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Thinner:	1/2 vol
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Pot life @ 68°F / 20°C

1 hour (Adding D885 or D886 is required to maintain pot life.)

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D887 Baking / Flexible Parts

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D873 Over 95°F / 35°C

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Spraygun Setup:



HVLP at the air cap

10 PSI

Conventional at spray gun

45 - 55 PSI

Fluid tip

1.3 - 1.5 mm or equivalent

Spray Viscosity

20 - 21 seconds #2 ZAHN (Signature type) @ 68°F / 20°C

Application:



Apply 2 Coats

1 full wet coat with decreased fluid volume then
1 full wet coat with normal fluid volume.

Dry times:



Between coats

5 - 10 minutes

Before baking

0 - 15 minutes



*Dust-free
68°F / 20°C*

30 - 45 minutes

*Dry to handle
68°F / 20°C*

4 hours minimum



*Tape Time
68°F / 20°C
140°F / 60°C*

8 hours
1 hour after cool down



*Air Dry
68°F / 20°C
140°F / 60°C*

8 hours
30 minutes



*IR (infrared)
Medium Wave
Short Wave*

15 minutes
9 minutes

Polishing

After bake cycle and 1 hour cool down. Use a foam pad with a minor cutting compound to remove any minor imperfections.

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

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 (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.

PPG Automotive Refinish

World Leaders In Automotive Finishes

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