



GLOBAL REFINISH
SYSTEM

Product Information

D8121 Premium LV Clearcoat 2.1 VOC

Product Description

D8121 Premium LV Clearcoat is a premium quality, high solids clearcoat specifically formulated for today's high production shop. D8121 offers ease of application along with superior gloss and hold out. The exceptionally short bake cycle and reduced baking temperatures provide increased productivity along with reduced operating cost.

D8121 is a compliant clear formulated to meet the VOC limits of the most stringent VOC markets in Southern California.

D8121 is designed for use over Global BC (see data sheet EU-02) and Envirobase (see data sheet EU-130).

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 D8121 Premium LV Clearcoat Clear over Global BC and Envirobase. See the product data sheet for details on Global BC (EU-02) & Envirobase system (EU-130) applications.

APPLICATION GUIDE:

Mix Ratio:



D8121 Premium LV Clearcoat: 3 vols
D82XX Hardener: 1 vol
Compliant Thinner: 1 vol



Potlife @ 68°F / 20°C: 4 hours

Hardener Selection:

D8210 : 55° – 75°F / 13° – 24°C
D8220 : 75° – 95°F / 24° – 35°C
D8230 : 95°F / 35°C & above

Compliant Thinner Selection:

D8764 : Up to 65°F / 18°C
D8774 : 65° – 77°F / 18° – 25°C
D8767 : 77° – 95°F / 25° – 35°C

Note: Smaller areas may require faster thinner .

Additives:



Use **D759 Matting base** to *flatten* D8121 Clear.

Matte Finish				Satin Finish						
<u>D8121</u>	<u>: D82XX</u>	<u>: D87XX</u>	<u>: D759</u>	<u>D8121</u>	<u>: D82XX</u>	<u>: D87XX</u>	<u>: D759</u>			
3	:	1	:	3	:	1	:	1	:	1

Use **D814 Plasticiser** to *flexibilize* D8121 Clear.

D8121 : D82XX : D87XX : D814
2 : 1 : 1 : 1

Note: When these products are used in accordance with the recommendations for combination with D759 or D814, RTS VOC is compliant with the 7.0 lbs./gal. Specialty Coatings category

Spraygun set-up:



Fluid Tip 1.3 – 1.5 mm or equivalent
Spray Viscosity 14 – 15 seconds #2 ZAHN (Signature type) @ 68°F / 20°C

Spray pressure:

HVLP at air cap 8 – 10 PSI
Conventional at spray gun 45 – 55 PSI

Number of coats:



Apply: 2 coats
Film build per wet coat 3.3 – 3.9 mils
Dried film build per coat 1.2 – 1.4 mils

Flash off at 68°F / 20°C:



Between coats 5 – 10 minutes
Before stoving 0 – 5 minutes

Drying times:





Dust-free
68°F / 20°C 20 – 40 minutes



Dry to handle
68°F / 20°C 3 – 4 hours minimum
140°F / 60°C 15 – 20 minutes





APPLICATION GUIDE

Drying times continued:

	<i>Tape Time</i>	68°F / 20°C 140°F / 60°C	6 – 8 hours 1 hour after cool down
	<i>Air Dry</i>	68°F / 20°C 120°F / 50°C 140°F / 60°C	8 hours D8210 – 10 minutes D8220 – 10 minutes D8230 – 10 minutes
	<i>IR (Infrared)</i>	Medium Wave Short Wave	15 minutes 8 minutes

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.

Overcoat/Recoat:

	<i>Overcoat/Recoat Time</i>	16 hours at 68°F / 20°C or after force dry/cool down. D8121 must be sanded before recoating with primer, color or clear.
	<i>Grade wet</i> <i>Grade dry</i>	U.S. 500 – 600 / European P800 – 1200 U.S. 400 – 500 / European P600 – 800
	<i>Overcoat with</i>	Any Global topcoat system
	<i>Polishing</i>	After bake cycle and 1 hr cool down. Use a foam pad with a minor cutting compound to remove any minor imperfections.

Performance Guidelines:

Allow the Global BC Color to flash off for 15 minutes (but no longer than 24 hours) before applying D8121 Clear. The timing will depend on thickness and temperature.

Recoating times will be extended at lower temperatures. Global D8121 may be sanded with 1200 grit paper or finer and polished when hard, to rectify minor imperfections.

Fading Out - D8121 Clear

After spot repairing, clean the gun and then spray Global Blending Thinner D8753 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	3.3 – 3.9 mils
Recommended dried film build per coat	1.2 – 1.4 mils

Theoretical coverage

569.74 sq.ft. per US gal.

Theoretical coverage in sq.ft./US gal. Ready-to-spray (RTS), giving 1 mils dry film thickness.

Percent solids by volume RTS

35.52

VOC

D8121	4,82 lbs. per US gal
D8121 less exempts	2,58 lbs. per US gal
D8121 : D8220 : D8774, 3 : 1 : 1	5.53 lbs. per US gal.
D8121 : D8220 : D8774, 3 : 1 : 1 less exempts	2.07 lbs. per US gal.

Premium LV Clearcoat 2.1 VOC

Mix Ratio:



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D82XX Hardeners: 1 vol

Compliant Thinners: 1 vol

Potlife @ 68°F / 20°F: 4 hours

Hardener Selection:

D8210 : 55° – 75°F / 13° – 24°C

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D8230 : 95°F / 35°C – above)

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Note: Smaller areas may require faster thinner

Additives:



Use **D759 Matting base** to *flatten* D8121 Clear.

Matte Finish

D8121 : D82XX : D87XX : D759
3 : 1 : 1 : 3

Satin Finish

D8121 : D82XX : D87XX : D759
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Spraygun set-up:



Fluid Tip	1.3 – 1.5 mm or equivalent
Spray Viscosity	14 – 15 seconds #2 ZAHN (Signature type) @ 68°F / 20°C
HVLP at air cap	8 – 10 PSI
Conventional at spray gun	45 – 55 PSI

Application:



Apply:	2 coats
Between coats	10 – 15 minutes
Before stoving	0 – 5 minutes
Film build per wet coat	3.3 – 3.9 mils
Dried film build per coat	1.2 – 1.4 mils

Drying times:



Dust-free 68°F / 20°C	20 – 40 minutes
Dry to handle	
68°F / 20°C	3 – 4 hours minimum
140°F / 60°C	15 – 20 minutes



Tape Time	
68°F / 20°C	6 – 8 hours
140°F / 60°C	1 hour after cool down



Air Dry	
68°F / 20°C	8 hours
120°F / 50°C	D8210 – 10 minutes
140°F / 60°C	D8220 – 10 minutes
	D8230 – 10 minutes



IR (Infrared)	
Medium Wave	15 minutes
Short Wave	8 minutes



Dry to Topcoat	
68°F / 20°C	16 hours @ 68°F / 20°C or after force dry/cool down
140°F / 60°C	D8121 must be sanded before recoating with primer, color or clear.

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.

- 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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