



GLOBAL REFINISH
SYSTEM

Product Information

D8115 Matte and D8117 Semi-Gloss Clearcoat System

Product Description

D8115 Matte and D8117 Semi-Gloss Clearcoats are designed for use over Envirobase[®] High Performance Waterborne, Global[®] BC and Deltron[®] DBC solvent basecoats. The Global Matte Clearcoat System consists of two versatile 2K acrylic urethane clearcoats designed to reproduce a range of low gloss levels, including the specialized repairs of vehicles or areas of vehicles originally finished with a low gloss clearcoat over a single or multistage basecoat color system (e.g. Lamborghini or Mercedes full body matte finish). To allow for the normal gloss variations due to color, model, position of repair on vehicle etc., the actual mix of the two clearcoats can be varied to match the vehicle to be repaired. The D8115 / D8117 or mixes of the two may also be used over rigid plastics without the need for special additives.

Preparation of Substrate



When masking a repair, care should be taken to minimize direct contact of masking tape onto the original matte finish. Where it is necessary to use masking tape directly on the original finish, the tape must be removed before baking to avoid marking of the original which may not recover.

D8115 / D8117 clearcoats must be applied on top of a clean and dust-free basecoat. The use of a tack cloth is recommended after the basecoat has flashed off.



Care should be taken to avoid dirt inclusion at all stages. Rectification of dirt inclusion in matte or low gloss finishes is not possible after the final coat of clearcoat.

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



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

Wash off sanding residue and dry thoroughly before re-cleaning with the appropriate Global substrate cleaner. The use of a tack rag is recommended.

APPLICATION GUIDE:

Mix Ratio:



D8115/D8117 Clear : 3 vols
D8239 Hardener : 1 vol
D871/D872/DT885/DT895 Thinners : 1½ vols



Note: The volume ratio shown above is for reference however it is important that to insure accurate and replicatable mixing of matte clearcoat finishes, they should be mixed by weight on a scale. **To verify a color match and gloss level, it is recommended that a test panel be sprayed before spraying the vehicle.** FC-01 – FC05 matte levels will appear with the color formulas that that require a low gloss finish. All mix by weight volumes for these formulas may be found on PaintManager®.

Pot life @ 70°F (21°C) : 1 - 2 hours depending on thinner

Blending ratio:

D8115 or D8117 clearcoats may be used individually or combined to achieve five different levels of gloss. See table below for % combinations.

	FC01 = Flat Lamborghini full body matte finish	FC02 = Matte	FC03 = Eggshell Mercedes, Smart, BMW, Fiat full body matte finishes	FC04 = Satin	FC05 = Semi-Gloss Older Mercedes lower body cladding
Percentage of Gloss	0 - 10.0%	10.1 - 20.0%	20.1 - 30.0%	30.1 - 45.0%	45.1 - 60.0%
D8115 %	100	85	70	40	0
D8117 %	0	15	30	60	100

Additives:



None

Note: Matte finish clearcoats may be applied over rigid plastics without the need to add a flexibilizer.

Spraygun Set-up:



Fluid Tip 1.2 - 1.4 mm or equivalent

Spray Viscosity 15 seconds DIN4

Spray Pressure:

HVLP 10 psi at the cap
Compliant 29 - 40 psi at the gun
Conventional 45 - 55 psi at the gun

Note: refer to spray gun manufacture recommended air pressure.

Application Process:

The preparation of color test panels to check the color and number of coats of clearcoat to achieve the correct matte effect is strongly recommended. The original matte finish can sometimes become less matte over time due to weathering and cleaning processes used by car owners. D8115/D8117 can be used individually or combined to achieve five levels of gloss.

Notes: No Fade-out process is possible for matte colors.

*The clearcoat can be de-nibbed to remove minor dirt inclusions after the flash off time between coats listed below. Any de-nibbing must be completed before the final coat of reduced gloss clearcoat is applied. **Dirt removal from the final low gloss finish is not possible.***



Application:

1 Full single coat
Flash off until evenly matte all over
+
1 Full single coat followed immediately by a lighter (½ coat) cross coat.
Flash off until evenly matte before baking.

Flash off between coats:

*15 - 30 minutes for best results, allow to dry matte**

***Note:** Allowing the clearcoat to flash off completely between coats and before baking is important to achieve an even appearance and gloss level over the whole area. The actual flash off times will depend on the hardener/thinner and temperature combination required to achieve the correct gloss effect and could be between 15 - 45 minutes.

Flash off at 70°F (21°C)



15 - 30 minutes ensuring the clearcoat is completely matte before baking.

Drying Times:



*Dust-free:
70°F (21°C) 45minutes*

*Dry to handle:
70°F (21°C) 12-16 hours
140°F (60°C) After cool down*



*Tape Time:
70°F (21°C) 12-16 hours
140°F (60°C) After cool down*



*Full Cure:
70°F (21°C) 24 hours
140°F (60°C) 40 minutes**



*IR (infrared):
Medium wave 15-20 minutes
Short wave 8-15 minutes*

**Bake time quoted is for metal temperature. Additional time should be allowed in the bake schedule to insure metal to reach recommended bake temperature.*

Overcoat/Recoat:

Sanding; Must be sanded before recoating to ensure proper adhesion.

Grade wet P800

Grade Dry P400-P500

*Overcoat/Recoat Time:
Air Dry at 70°F (21°C) 12 hours*

*Force Dry at 140°F (60°C), or IR After cool down
Overcoat with: Envirobase High Performance, Global BC or Deltron DBC Basecoats.*

Performance Guidelines:

The Gloss levels achieved with this clear may vary depending upon film thickness and application. Low film thickness and dry application will give a lower gloss level. High film thickness and wetter application will give a higher gloss level. It is recommended that D8115/D8117 clearcoats be only used for complete panel repairs.

General Care and Maintenance of Matte Finishes

The following guidance on Care and Cleaning of matte finish vehicles is aimed at the car owner, and applies to both the OE and the repair finish. Particular care must be taken with matte finishes to maintain an original even matte effect. Guidance for the car owner on maintaining the even matte effect over time

Matte/Low gloss finishes can be relatively easily marked with general handling and day to day use (door/hood/deck lid opening, shoe scuffing on entry or exit of vehicle etc.). Care should be taken with these operations because marking or changing of the matte effect could result.

Care should be taken to avoid spillage of fuel onto the matte/low gloss finishes. Fuel spills should be removed as soon as possible using the washing guidelines below, to avoid permanent damage or altering of the low gloss effect.

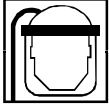
1. In order to keep the matte surface effect, the use of paint cleaner, abrasives or polishes and wax polishes **must** be avoided. The vehicle **must** not be polished.
2. Polishing will lead to a higher, uneven gloss effect.
3. Cleaning with unsuitable materials could alter the matte effect (generally increasing gloss).
4. Automated car washing should be avoided. The preferred car washing method is by hand with a soft sponge, mild soap and lots of water. Frequent car washing over a period of time could lead to increased and inconsistent gloss levels across a car panel. Washing under direct sunlight should also be avoided.
5. Insects and bird droppings should be removed immediately. These residues should be soaked in water to soften and/or removed carefully with a high pressure cleaning equipment. In the case of strongly adhered residues, a spray on insect remover should be used prior to washing.
6. Whenever using any type of cleaning fluids with soft sponges or cloths, it is essential not to apply pressure or rub the matte finish. A gentle wipe/spray on, wipe off technique should be used. Applying pressure will alter the matte effect and result in an uneven appearance.

Technical Data:	
Total dry film build:	D8115 / D8117 : D8239 : D871 / D872 / DT885 / DT895
Minimum	2.0 mils
Maximum	2.5 mils
Recommended film build per wet coat	2.1 – 3.1 mils
Recommended dried film build per coat	1.0 – 1.25 mils

RTS Combinations:	D8115 : D8239 : D871 / D872 / DT885 / DT895	D8117 : D8239 : D871 / D872 / DT885 / DT895	D8115/ D8117 : D8239 : D871 / D872 / DT885 / DT895
Volume Ratio:	3 : 1 : 1½	3 : 1 : 1½	3 : 1 : 1½
Coatings Category	Specialty Coating	Specialty Coating	Specialty Coating
VOC Regulatory (Less Water Less Exempts)	4.79 - 4.82 lbs/gal (574 - 578 g/L)	4.79 - 4.82 lbs/gal (574 - 578 g/L)	4.79 - 4.82 lbs/gal (574 - 578 g/L)
Solids vol. %	34.1	34.0	34.0 - 34.1
Sq. Ft. Coverage / U.S.gal.(1 mil. @ 100% transfer efficiency)	547	546	546 - 547

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.



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