



Product Information

EC700 ONE VISIT[®] Production Clearcoat

Product Description

ENVIROBASE[®] High Performance EC700 *One Visit* Production Clearcoat is a high gloss, high solids productivity clearcoat designed specifically for use with *Envirobase* High Performance Waterborne Basecoat. The *One Visit* clearcoat, with its short bake times and zero flash time, reduces cycle times while maintaining the quality and appearance required by high production shops. From an environmental standpoint, the low 2.1 VOC of EC700 *One Visit* Production Clearcoat along with the high solids resin also decreases clearcoat material usage and therefore greatly reduces the overall VOC emissions.

Preparation of Substrate



- In all cases, wash all surfaces to be painted with soap and water, then apply the appropriate GLOBAL REFINISH SYSTEM[™] or ONECHOICE[®] cleaner. Ensure that the substrate is thoroughly cleaned and dried both before and after application work.
- Wet sand with US 500-600 / European P800-P1200 grade paper or dry sanding with US 400-500 / European P600-P800 grade paper.
- Wash off residue and dry thoroughly before re-cleaning with appropriate *Global Refinish System* or *OneChoice* substrate cleaner. The use of a tack rag is recommended.

APPLICATION GUIDE:

Mixing Ratio for EC700



Standard:

EC700: 4 vols
ECH70xx: 1 vol
D8767: * vol (if needed)

Accelerated:

EC700: 4 vols
ECH70xx: 1 vol
SL93LV: 2%
D8767: * vol (if needed)



Pot Life at 70°F (21°C): Standard: 1-1.5 hours
 Accelerated: 1-1.5 hours

* For the standard two coat application method, 1/2 part of D8767 thinner may be added to improve flow if needed.

Use the tables to determine the proper hardener needed for the application.

Hardener:

ECH7070 Fast Hardener 55-75°F (13-24°C)
 ECH7080 Medium Hardener 75-95°F (24-35°C)
 ECH7090 Slow Hardener 95°F (35°C) and above

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

Thinner:

D8767 Slow Compliant Thinner

Accelerator:

SL93LV Accelerator

Optional Additives:



SLV814 Universal Flexibilizer: add 10% to RTS volume

When used on plastic parts, EC700 does not require the use of SLV814 Universal Flexibilizer. However, for very flexible or leading edge parts such as bumper covers and fascia's, the addition of SLV814 will improve overall flexibility.

Spraygun Set-up and Pressure:



HVLP: 10 maximum psi at the cap
Compliant: 29 - 40 psi at the gun
Fluid Tip: 1.2-1.4 mm
Spray Viscosity: 17-19 seconds DIN 4 at 70°F (21°C)

Note: For best overall results, refer to the spray gun manufacturer's recommendations for optimum inlet air pressures.

Application:



One Visit: Apply 1 light to medium flowing coat immediately followed by a second medium coat to give 2 mils dry film thickness.
or
Standard 2 Coat: Apply 2 single medium wet coats allowing 5 to 10 flash time between each coat, to provide for 2-2.5 mils dry film thickness.

Flash Off at 70°F (21°C):



One Visit: Allow 1 minute of flash time between the 1st and 2nd coats. For 2 or more panels, no flash time between coats is required.
or
Standard 2 Coat: Allow 5 to 10 minutes between coats depending on your spray booth conditions and/or hardener choice.

Drying Times:



	Standard	w/ Accelerator
Dust-free: 70°F (21°C)	20-40 minutes	20-30 minutes



Dry to Handle: 70°F (21°C)	3-5 hours	2-3 hours
Air Dry: 70°F (21°C)	5-7 hours	3-5 hours

Force Dry: 140°F (60°C) (Metal Temperature)	w/ ECH7070 - 15 minutes w/ ECH7080 - 20 minutes w/ ECH7090 - 20 minutes	w/ ECH7070 - 10 minutes w/ ECH7080 - 15 minutes w/ ECH7090 - 20 minutes
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Tape Time: 70°F (21°C)	3-5 hours	2-3 hours
IR (Infrared):	8-15 minutes	8-15 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.

Cumulative Parts Mix by Weight Activation Chart for EC700 One Visit Production Clearcoat 4:1 or 4:1+2%

Clearcoat Required	Standard		Accelerated		
	4 Parts EC700	1 Part ECH70xx	4 Parts EC700	1 Part ECH70xx	2% SL93LV
¼ Pint / 4 oz.	126.1	154.5	120.1	147.2	154.1
½ Pint / 8 oz.	252.2	309.0	240.2	294.3	308.0
¾ Pint / 12 oz.	378.3	463.6	360.3	441.5	462.1
1 Pint / 16 oz.	504.4	618.1	480.4	588.7	616.1
1.5 Pints / 24 oz.	756.6	927.1	720.5	882.9	924.1
1.75 Pints / 28 oz.	882.7	1081.7	840.6	1030.1	1078.1
1 Quart / 32 oz.	1008.8	1236.2	960.7	1177.3	1232.2
1.5 Quarts / 48 oz.	1513.1	1854.2	1441.1	1765.9	1848.2
2 Quarts / 64 oz.	2017.5	2472.3	1921.4	2354.5	2464.2

Overcoat/Recoat:



Overcoat/Recoat Time: 12-16 hours at 70°F (21°C) air dry or after force dry and cool down. EC700 must be sanded before recoating with primer, color or clear.

Grade wet: US 500-600 / European P800-P1200
Grade dry: US 400-500 / European P600-P800



Overcoat with: *Envirobase* High Performance Basecoat



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* High Performance Waterborne Basecoat to flash off for 15 minutes (but no longer than 24 hours) before applying EC700. If the basecoat dries longer than 24 hours, additional basecoat must be applied before clearcoating. The timing will depend on thickness and temperature.
- Recoating times will be extended at lower temperatures. EC700 may be sanded with P1200 grit paper or finer and polished when hard, to rectify minor imperfections.

Fading Out EC700

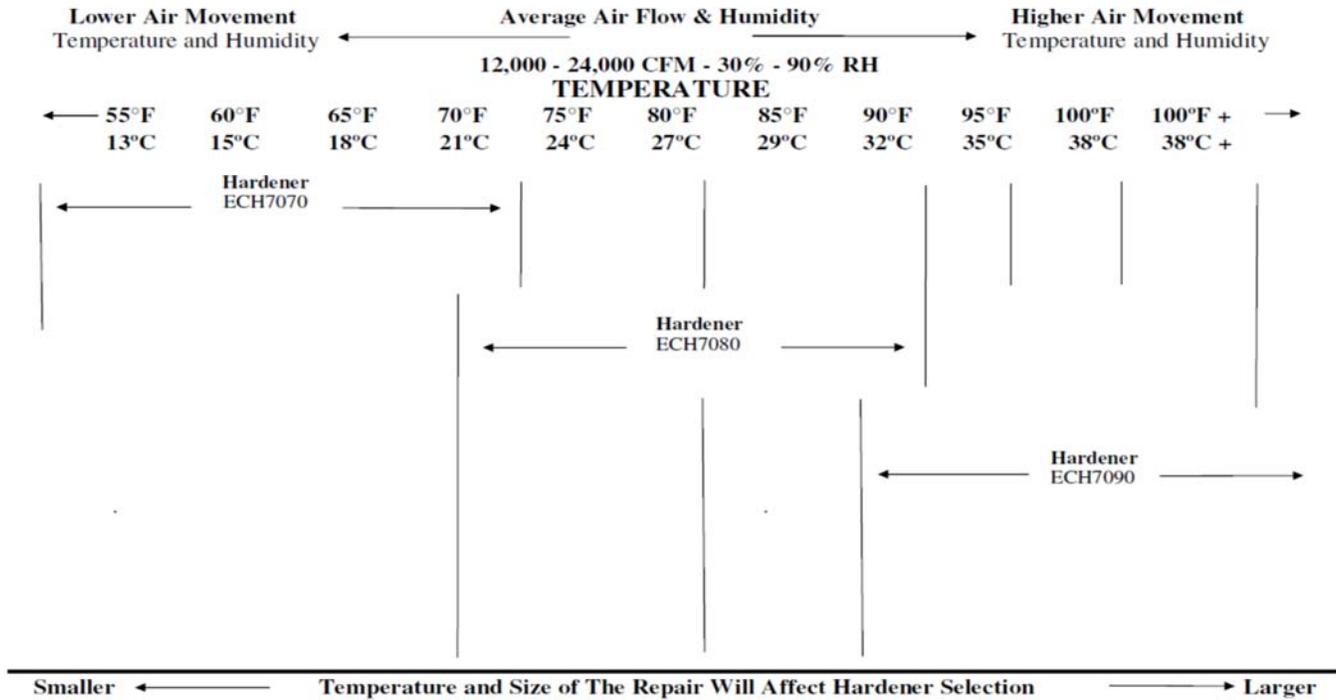
After spot repairing. Use *OneChoice* SXA840 blending solvent and apply starting from the outside of the repair moving towards the center of the repaired area to lose the clearcoat blend edge.

Technical Data:

Total dry film build:
 Minimum: 2.0 mils
 Maximum: 3.0 mils
 Recommended film build per wet coat: 2.0-2.5 mils
 Recommended dried film build per coat: 1.0-1.5 mils

RTS Combinations	EC700 : ECH70xx	EC700 : ECH70xx : D8767	EC700 : ECH70xx + SL93LV + D8767	EC700 : ECH70xx : SLV814
	Clear Coating	Clear Coating	Clear Coating	Clear Coating
Weight Ratio:	4 : 1	4 : 1 : 0.5	4 : 1 + 2% + 0.5	4 : 1 + 10%
VOC Actual (g/L)	155	146	137-139	145
VOC Actual (lbs./ US gal.)	1.29	1.22	1.14-1.16	1.21
VOC Regulatory (less water, less exempt (g/L)	250	249	247-250	243
VOC Regulatory (less water, less exempt (lbs./ US gal.)	2.09	2.08	2.06-2.09	2.03
Density (g/L)	1164	1171	1177-1182	1168
Density (lbs./ US gal)	9.71	9.77	9.82-9.86	9.75
Volatiles wt. %	57.1	59.5	62.3	58.7
Water wt. %	0.0	0.0	0.0	0.0
Exempt wt. %	43.7	47.0	50.5-50.7	46.2
Water vol. %	0.0	0.0	0.0	0.0
Exempt vol. %	67.9	41.3	44.5	40.3
RTS Solids vol. %	44.4	42.0	39.3-39.5	43.2
Sq. Ft. Coverage at 1 mil. at 100% transfer efficiency	712	674	630-634	693

EC700 ONE - VISIT™ PRODUCTION CLEARCOAT HARDENER SELECTION GUIDE



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 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.
- Store waterborne and solvent borne waste separately. A competent agent with appropriate certification must handle all waterborne wastes. Wastes must be disposed in accordance with all Federal, State, Provincial and local laws and regulations.
- 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 systems 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, result, 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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