

# Product Information

## EC520 En-V® High Production Clearcoat

### Product Description

EC520 **En-V**® High Production Clearcoat is engineered specifically for use with ENVIROBASE® High Performance Waterborne Basecoat. This clearcoat utilizes the **En-V** Resin technology to meet the throughput demands of any shop while delivering a premium appearance and excellent gloss retention. EC520 is ideal for 1-4 panel repairs with ease of application built into the design, consistent with the characteristics of every **En-V** clearcoat. EC520 **En-V** High Production Clearcoat is compliant in all North American refinish markets.

### Preparation of Substrate



- Wash all surfaces to be painted with soap and water, then apply the appropriate ONECHOICE®, GLOBAL REFINISH SYSTEM® or DELTRON® 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 cleaner. The use of a SX1070 *OneChoice* tack rag is recommended.

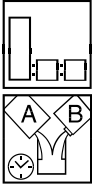
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**APPLICATION GUIDE:**

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**Mixing Ratio for EC520 En-V High Production Clearcoat**

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<b>EC520:</b>	3 parts
<b>ECH5075:</b>	1 part
<b>ECRxx/DT18xx/D87xx:</b>	1 part
<b>Pot Life at 70°F (21°C):</b>	45 minutes

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**Hardener:**ECH5075 Standard Hardener

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**Reducer:**

ECR65	Low Temp Reducer	DT1845	Compliant Reducer Normal
ECR75	Mid Temp Reducer	DT1850	Compliant Reducer Medium
ECR85	High Temp Reducer	DT1855	Compliant Reducer Slow
ECR98	Hot and Humid Ultra High Temp Reducer	D8764	Fast Compliant Thinner
		D8774	Medium Compliant Thinner
		D8767	Slow Complaint Thinner

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See reducer selection guide on page 4 for additional information

ECR98 is the required retarder for all markets.

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**Optional Additives:**

<b>SLV814 Universal Flexibilizer:</b>	add 10% to RTS volume
<b>SL93LV Accelerator</b>	add 2% to RTS volume
<b>SLV73 Fisheye Eliminator:</b>	add 1 oz. to RTS quart

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SLV814 Universal Flexibilizer is recommended not required for plastic parts

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**Spray Gun Set-up and Pressure:**

<b>Fluid Tip:</b>	1.2 - 1.4 mm
<b>Spray Viscosity:</b>	14 - 15 secs DIN4 at 70°F (21°C)
<b>HVLP:</b>	10 maximum psi at the cap
<b>Compliant:</b>	29 - 40 psi at the gun

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**Note:** Refer to the spray gun manufacturer's recommendations for optimum inlet air pressures.

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**Application:**

<b>Apply:</b>	2 medium wet coats.
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**Film Build:**

<b>Minimum dry film build:</b>	2.0 mils
<b>Maximum dry film build:</b>	3.5 mils
<b>Recommended wet film build per coat:</b>	2.0 - 2.5 mils
<b>Recommended dry film build per coat:</b>	1.0 - 1.5 mils

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**Flash Off at 70°F (21°C):**

<b>Flash:</b>	3 - 5 minutes between coats
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**Drying Times:**

<b>Dust-free:</b> 70°F (21°C)	30 - 35 minutes
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<b>Air Dry to Re-assemble:</b> 70°F (21°C)	1.5 - 2 hours
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<b>Force Dry:</b> 120°F (49°C) 140°F (60°C)	20 minutes 15 minutes - <i>minimize metal temperatures exceeding 140°F (60°C)</i>
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<b>Tape Time:</b> 70°F (21°C)	1.5 - 2.5 hours
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<b>IR (Infrared):</b>	NA
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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 / Polishing:**



**Overcoat/Recoat Time:** 2 hours after recommended air dry or force dry bake cycle.

**Re-Repair:** Re-repair area must be sanded appropriately before recoating with primer, color or clearcoat



**Overcoat with:** *Envirobase* High Performance primer, color or clearcoat.

**Polishing:** After recommended air dry or force dry and cool down, minor dirt nibs can be removed. Sand with P1500 or finer and follow normal polishing procedures.

**Performance Guidelines:**

Allow basecoat to thoroughly dry before applying EC520 *En-V* High Production Clearcoat. If allowed to dry longer than 24 hours, additional basecoat must be applied before clearcoating. The timing will depend on film thickness, temperature and humidity.

**Technical Data:**

RTS Combinations	EC520 : ECH5075 : ECRxx/DT18xx/ D87xx	EC520 : ECH5075 : ECRxx/DT18xx/ D87xx + SLV814 <i>Flex Additive</i>	EC520 : ECH5075 : ECRxx/DT18xx/ D87xx + SL93LV <i>Accelerator</i>	EC520: ECH5075 : ECRxx/DT18xx/ D87xx + SLV73 <i>Fisheye Eliminator</i>
Applicable Use Category	Clear Coating	Clear Coating (Flexed)	Clear Coating	Clear Coating
Weight Ratio:	3 : 1 : 1	3 : 1 : 1 +10%	3 : 1 : 1 +2%	3: 1 : 1 + 1 oz. RTS qt.
VOC Actual (g/L)	58 - 153	56 - 145	56 - 152	56 - 150
VOC Actual (lbs./ US gal.)	0.48 - 1.28	0.47 - 1.21	0.47 - 1.27	0.47 - 1.25
VOC Regulatory (less water, less exempt (g/L)	114 - 248	114 - 242	113 - 249	114 - 248
VOC Regulatory (less water, less exempt (lbs./ US gal.)	0.95 - 2.07	0.95 - 2.02	0.94 - 2.08	0.95 - 2.07
Density (g/L)	1,117 - 1,176	1,125 - 1,180	1,121 - 1,178	1,119 - 1,176
Density (lbs./ US gal)	9.32 - 9.81	9.39 - 9.85	9.36 - 9.83	9.34 - 9.81
Volatiles wt. %	56.0 - 58.3	57.4 - 59.8	57.0 - 59.2	57.1 - 59.6
Water wt. %	0.0	0.0	0.0	0
Exempt wt. %	42.2 - 53.3	44.6 - 54.9	43.4 - 54.3	43.8 - 54.7
Water vol. %	0.0	0.0	0.0	0
Exempt vol. %	38.0 - 49.1	39.9 - 50.5	38.8 - 50.1	39.4 - 50.6
RTS Solids vol. %	43.9 - 44.0	42.9 - 3.0	43.2 - 43.3	42.8 - 42.9
RTS Solids wt. %	41.7 - 44.0	40.2 - 42.6	40.8 - 43.1	40.4 - 43.0
Sq. Ft. Coverage at 1 mil. at 100% transfer efficiency	704 - 706	688 - 690	693 - 695	687 - 688

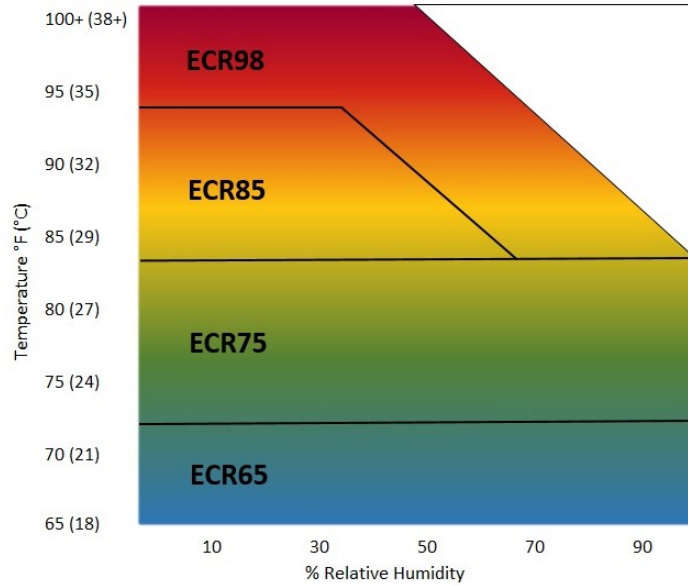
**EC520 En-V High Production Clearcoat Reducer Selection Guide**

**Higher Air Movement**  
Temperature and Humidity  
(Larger)

Average Air Flow & Humidity  
12,000-24,000 CFM - 30%-90% RH

**Lower Air Movement**  
Temperature and Humidity  
(Smaller)

EC520 *En-V* High Production Clearcoat Reducer Selection Guide



**For Repairs greater than 3 panels consider using the next higher temperature reducer**

**Temperature, Air Flow, Humidity and Size of the Repair will affect Reducer selection**

**HEALTH AND SAFETY**

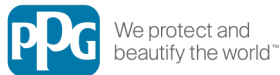
See Material Safety Data Sheet and Labels for additional safety information and handling instructions.



- 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 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, 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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