ENVIROBASE®
HIGH PERFORMANCE

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

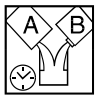


- Wash all surfaces to be painted with soap and water, then apply the appropriate ONECHOICE® or DELTRON® cleaner. Ensure that the substrate is thoroughly cleaned and dried both before and after application work.
- Wet sand with US 500 - 600 / European P800 - P1200 grade paper or dry sanding with US 400 - 500 / European P600 - P800 grade paper.
- Wash off residue and dry thoroughly before re-cleaning with appropriate cleaner. The use of a SX2070 *OneChoice* tack rag is recommended.

APPLICATION GUIDE:

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

EC520:	3 parts
ECH5075:	1 part
ECRxx/DT18xx	1 part



Pot Life at 70°F (21°C): 45 minutes

Hardener:
ECH5075 Standard Hardener

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		

ECR98 is the required retarder for all markets.

See reducer selection guide on page 4 for additional information

Optional Additives:

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

SLV814 Universal Flexibilizer is recommended not required for plastic parts

Spray Gun Set-up and Pressure:

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

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

Application:

Apply: 2 medium wet coats.

Film Build:

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

Flash Off at 70°F (21°C):

Flash: 3 - 5 minutes between coats

Drying Times:

Dust-free:
70°F (21°C) 30 - 35 minutes

Air Dry to Re-assemble:
70°F (21°C) 1.5 - 2 hours

Force Dry:
120°F (49°C) 20 minutes
140°F (60°C) 15 minutes - *minimize metal temperatures exceeding 140°F (60°C)*

Tape Time: 1.5 - 2.5 hours
70°F (21°C)

IR (Infrared): NA

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:

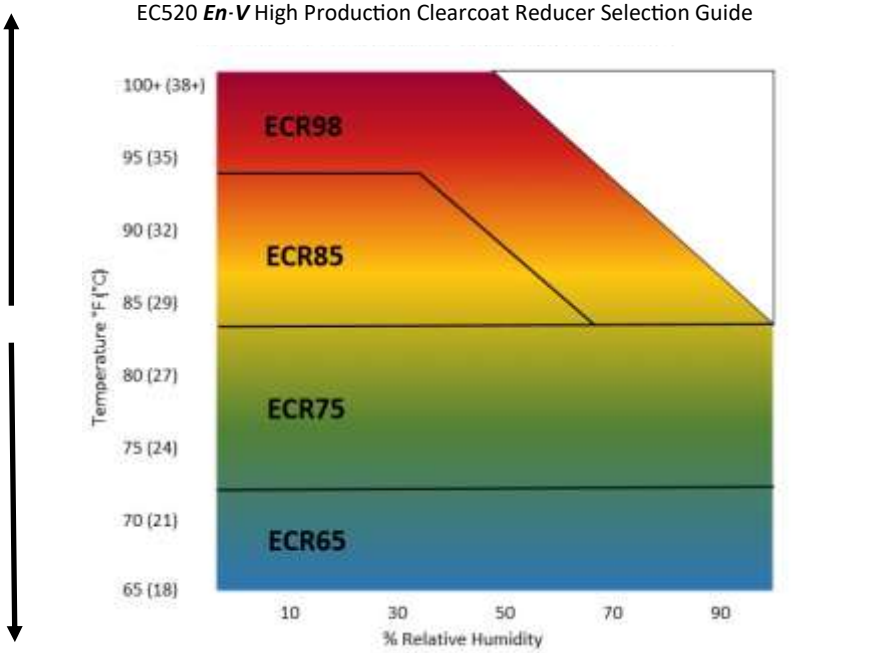
RTS Combinations	**EC520 : ECH5075 : ECRxx/DT18xx**	**EC520 : ECH5075 : ECRxx/DT18xx + SLV814** *Flex Additive*	**EC520 : ECH5075 : ECRxx/DT18xx+ SL93LV** *Accelerator*	**EC520: ECH5075 : ECRxx/DT18xx + SLV73** *Fisheye Eliminator*
Applicable Use Category	Clear Coating	Clear Coating (Flexed)	Clear Coating	Clear Coating
Volume 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)



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

PPG We protect and beautify the world™

PPG Automotive Refinish
19699 Progress Drive
Strongsville, OH 44149
800.647.6050

PPG Canada Inc.
2301 Royal Windsor Drive, Unit #6
Mississauga, Ontario L5J 1K5
888.310.4762

Follow us online:

www.ppgrefinish.com