
Product Information

ECS21 White, ECS25 Gray, ECS27 Black A-Chromatic LV Sealer

Product Description

A-Chromatic LV Sealer ECS21, 25 and 27 are premium quality, wet on wet sealers specifically for use under Envirobase High Performance Waterborne Basecoat.

The fast drying A-Chromatic LV Sealer have superior flow properties and excellent topcoat holdout. A variety of A-Chromatic grays can be achieved by intermixing of the three packaged sealers. The sealers can be applied over un-sanded OEM e-coat, sanded original finishes and/or properly prepared and treated bare steel, aluminum, fiberglass and plastic.

Preparation of Substrate

In all cases, wash all surfaces to be painted with soap and water, then apply the appropriate OneChoice[®] Cleaner. Ensure that the substrate is thoroughly cleaned and dried both before and after preparation work.



Original Paintwork should be sanded using European P400 / U.S. 360 grit discs (dry) or European P600 / U.S. 400 grit paper (wet). Exposed metal should be spot-primed with a suitable bare metal primer (see below).



Aluminum, Bare Steel and Galvanized Steel must be clean, rust-free and abraded thoroughly using European P180 / U.S. 180 to European P280 / U.S. 240 grit paper (wet). These substrates must be primed with an etch primer. Additional film build over etch primers is strongly recommended, a minimum of 1.5 mils of the A-Chromatic LV Sealer must be applied in two coats.

Electrodeposition Primer must be thoroughly cleaned and may then be directly overcoated with the A-Chromatic LV Sealer as a Wet-on-Wet Sealer without abrading.

Polyester Body Fillers should be dry sanded using European 280 / U.S. 240 grit paper.



Fiber Glass and SMC should be dry sanded using European P280 / U.S. 240 grit paper.

Plastic should be dry sanded with European P600 / U.S. 400 (use a finer grit for softer plastics) and primed first with a PPG Plastic Adhesion Promoter.

APPLICATION GUIDE

Mixing Ratio



ECS2X LV Sealer : 4 Vols.
EH391/EH392 Hardener : 1 Vol.
D87XX Thinners : 1 Vol.

Thinner Selection

D8764 : Fast Compliant Thinner
D8774 : Medium Compliant Thinner
D8767 : Slow Compliant Thinner

Potlife



1 hour @ 70°F (21°C)

Additives



SLV814 Ready-to-Spray ECS2X LV Sealer: 10 Vols
Universal
Flexibilizer SLV814: 1 Vol

Spraygun set-up



Fluid Tip 1.4 - 1.6 mm or equivalent
Spray Viscosity 20 - 25 seconds #2 Zahn @ 70° F (21°C)

Spray pressure

HVLP at air cap 10 PSI
Conventional at spray gun 40 - 45 PSI

Number of coats



1-2 coats
Film build per wet coat 2.5 mils
Dried film build per coat 1.0 mils

Flash off at 20°C / 68°F



Between coats 5 - 10 minutes
Before baking 5 - 10 minutes
Before Topcoating 15 minutes @ 70°F (21°C) for 1 coat
30 minutes @ 70°F (21°C) for 2 coats
After 72 hours, sealer must be sanded. If sanded film is below 1 mil, sealer must be reapplied.

Drying times



Dust-free 20°C / 68°F 10 minutes



Dry to handle 20°C / 68°F 1 hour



Tape Time 20°C / 68°F 1½ hours



IR (Infrared)
IR medium wave 10 minutes
IR short wave 5 minutes

Overcoat / Recoat



Envirobase High Performance

15 minutes @ 70°F (21°C) for 1 coat
 30 minutes @ 70°F (21°C) for 2 coats
After 72 hours, sealer must be sanded. If sanded film is below 1 mil, sealer must be reapplied.



Grade wet
Grade dry

P1000 / U.S. 500 grade paper
 P1000 / U.S. 500 grade paper

Performance Guidelines

- The use of HVLP spray equipment can give an increase in transfer efficiency of around 25% depending upon the make and model of equipment use.
- For all substrates except unsanded electrodeposition primer, ensure that the surface is thoroughly sanded to the panel edge or to a distance several centimeters beyond the damaged area, whichever is the smaller.
- Do not attempt spot repair on original or refinish thermoplastic applications, lacquer or 1K finishes.
- Partially used cans of hardener must be carefully closed.

Technical Data

Total dry film build:

| | |
|----------------------------------|------------------|
| <i>Minimum</i> | 25µm / 1.0 mil |
| <i>Maximum</i> | 37µm / 1.5 mils |
| <i>Film build per wet coat</i> | 2.5 mils / 62.5µ |
| <i>Dried film build per coat</i> | 1.0 mils / 25µ |

Theoretical coverage

Theoretical coverage in sq.ft./US gal. ready-to-spray (RTS), 1.0 mil dry film thickness 550 sq.ft. per US gal.

Percent solids by volume RTS

34.5%

| | ECS2X: EH391: D8764/74/67 | ECS2X: EH392: D8764/74/67 | ECS2X: EH391: D8764/74/67 + SLV814 | ECS2X: EH392: D8764/74/67 + SLV814 |
|---|--|--|---|---|
| RTS Combinations: | | | | |
| Volume Ratio: | 4 : 1 : 1 | 4 : 1 : 1 | 4 : 1 : 1 + 10% | 4 : 1 : 1 + 10% |
| Applicable Use Category | Primer | Primer | Primer | Primer |
| VOC Actual (g/L) | 95 | 111 | 90 | 105 |
| VOC Actual (lbs/gal) | 0.80 | 0.93 | 0.75 | 0.87 |
| VOC Regulatory (less water less exempt) (g/L) | 218 | 246 | 210 | 236 |
| VOC Regulatory (less water less exempt) (lbs/gal) | 1.82 | 2.05 | 1.75 | 1.97 |
| Density (g/L) | 1372 - 1431 | 1365 - 1424 | 1359 - 1412 | 1352 - 1405 |
| Density (lbs/gal) | 11.45 – 11.94 | 11.39 – 11.88 | 11.34 – 11.78 | 11.28 – 11.72 |
| Volatiles wt. % | 57.4 – 59.4 | 57.3 – 59.3 | 58.7 – 60.5 | 58.6 – 60.4 |
| Water wt. % | 0.0 | 0.0 | 0.0 | 0.0 |
| Exempt wt. % | 50.5 – 52.7 | 49.3 – 51.5 | 52.1 -54.1 | 51.0 – 52.9 |
| Water vol. % | 0.0 | 0.0 | 0.0 | 0.0 |
| Exempt vol. % | 56.6 | 55.0 | 57.3 | 55.8 |

A-Chromatic Gray Mixing Chart

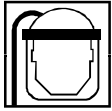
A-Chromatic LV Sealers

This chart can be used to mix the A-Chromatic LV Sealer. The G1 - G7 ratios will help to achieve better hiding when used as a guide for mixing the A-Chromatic LV Sealer.

| Mix Ratio By Volume | | | Mix Ratio By Cumulative Weight | | | | | | | |
|---------------------|-------|--------------------|--------------------------------|--------|------|-------|--------|--------|------|-------|
| Mix Ratio | | | Grams | | | | Parts | | | |
| | | | ½ Pint | ½ Pint | Pint | Quart | ½ Pint | ½ Pint | Pint | Quart |
| G1 | ECS21 | 4 | 116 | 232 | 464 | 928 | 131 | 262 | 523 | 1047 |
| | EH39X | 1 | 141 | 282 | 564 | 1128 | 159 | 318 | 636 | 1272 |
| | D87XX | 1 | 167 | 334 | 668 | 1336 | 188 | 377 | 753 | 1507 |
| G2 | ECS21 | Mix By Weight Only | 110 | 220 | 440 | 880 | 124 | 248 | 496 | 992 |
| | ECS25 | | 116 | 232 | 464 | 928 | 131 | 262 | 523 | 1047 |
| | EH39X | | 141 | 282 | 564 | 1128 | 159 | 318 | 636 | 1272 |
| | D87XX | | 167 | 334 | 668 | 1336 | 188 | 377 | 753 | 1507 |
| G3 | ECS21 | 3 | 87 | 174 | 348 | 696 | 98 | 196 | 392 | 785 |
| | ECS25 | 1 | 116 | 232 | 464 | 928 | 131 | 262 | 523 | 1047 |
| | EH39X | 1 | 141 | 282 | 564 | 1128 | 159 | 318 | 636 | 1272 |
| | D87XX | 1 | 167 | 334 | 668 | 1336 | 188 | 377 | 753 | 1507 |
| G4 | ECS21 | 2 | 58 | 116 | 232 | 464 | 65 | 131 | 262 | 523 |
| | ECS25 | 2 | 116 | 232 | 464 | 928 | 131 | 262 | 523 | 1047 |
| | EH39X | 1 | 141 | 282 | 564 | 1128 | 159 | 318 | 636 | 1272 |
| | D87XX | 1 | 167 | 334 | 668 | 1336 | 188 | 377 | 753 | 1507 |
| G5 | ECS25 | 4 | 116 | 232 | 464 | 928 | 131 | 262 | 523 | 1047 |
| | EH39X | 1 | 141 | 282 | 564 | 1128 | 159 | 318 | 636 | 1272 |
| | D87XX | 1 | 167 | 334 | 668 | 1336 | 188 | 377 | 753 | 1507 |
| G6 | ECS25 | 3 | 87 | 174 | 348 | 696 | 98 | 196 | 392 | 785 |
| | ECS27 | 1 | 116 | 232 | 464 | 928 | 131 | 262 | 523 | 1047 |
| | EH39X | 1 | 141 | 282 | 564 | 1128 | 159 | 318 | 636 | 1272 |
| | D87XX | 1 | 167 | 334 | 668 | 1336 | 188 | 377 | 753 | 1507 |
| G7 | ECS27 | 4 | 115 | 230 | 460 | 920 | 130 | 259 | 519 | 1038 |
| | EH39X | 1 | 140 | 280 | 560 | 1120 | 158 | 316 | 632 | 1263 |
| | D87XX | 1 | 166 | 332 | 664 | 1328 | 187 | 374 | 749 | 1498 |

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.
- 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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PPG Industries
19699 Progress Drive
Strongsville, OH 44149
1-800-647-6050

PPG Canada Inc.
2301 Royal Windsor Drive Unit #6
Mississauga, Ontario L5J 1K5
1-888-310-4767