

Product Information

ECS21 White, ECS27 Black A-Chromatic LV Sealer

SPECIAL

Product Description

A-Chromatic LV Sealers ECS21 and ECS27 are premium quality, wet on wet sealers specifically for use under ENVIROBASE® High Performance Waterborne Basecoat.

This special product information sheet is designed to provide directions for creating A-Chromatic shades G3, G5 and G6 using only the ECS21 White and ECS27 Black sealers along with appropriate hardener and reducer.

This fast drying A-Chromatic LV sealer has superior flow properties and excellent topcoat holdout. 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 / US 360 grit discs (dry) or European P600 / US 400 grade 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 / US 180 to European P280 / US 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 P280 / US 240 grit paper.

Gel Coated Fiber Glass and SMC should be dry sanded using European P280 / US 240 grit paper.

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

APPLICATION GUIDE

Mixing Ratio



ECS2x LV Sealer:
EH391 Hardener:
DT1855 Reducer:

4 Vols.
1 Vol.
1 Vol.

Hardener

EH391 Standard Undercoat Hardener

Reducer

DT1855 Compliant Reducer Slow

Pot Life



1 hour at 70°F (21°C)

Additives



SLV814 Universal Flexibilizer:

Ready to Spray ECS2x LV Sealer: 10 Vols.
SLV814: 1 Vol.

Spraygun set up



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

Spray Pressure

HVLP at the air cap 10 psi
Compliant at the spray gun 29 - 40 psi

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

Number of Coats



1 - 2 coats

Film build per wet coat: 2.5 mils
Dried film build per coat: 1.0 mils

Flash Off 70°F (21°C)



Between Coats: 5 - 10 minutes
Before Baking: 5 - 10 minutes
Before topcoating: 15 minutes at 70°F (21°C) for 1 coat
30 minutes at 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 70°F (21°C) 10 minutes

Dry to handle 70°F (21°C) 1 hour

Tape Time 70°F (21°C) 1½ hours



IR (Infrared) 10 minutes Medium Wave
5 minutes Short Wave

Overcoat/Recoat



Envirobase High Performance

15 minutes at 70°F (21°C) for 1 coat
30 minutes at 70°F (21°C) for 2 coats

Note: After 72 hours, sealer must be sanded. If sanded film is below 1 mil, sealer must be reapplied.



Grade wet: P1000 / US 500 grade paper
Grade dry: P1000 / US 500 grade paper

APPLICATION GUIDE (cont'd):

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 the equipment used.
- For all substrates except un-sanded 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:

Minimum	25 μ / 1.0 mils
Maximum	37 μ / 1.5 mils
Film build per wet coat	62.5 μ / 2.5 mils
Dried film build per coat	25 μ / 1.0 mils
% solids by volume RTS	34.5%
Theoretical coverage*	550 sq. ft. per US gallon

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

AChromatic Gray Mixing Chart

AChromatic LV Sealer

This chart can be used to mix the A-Chromatic LV Sealer.

The G3-G6 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 Parts/Grams							
	Mix Ratio	4 oz.	6 oz.	8 oz.	12 oz.	16 oz.	20 oz.	24 oz.	32 oz.
G3	ECS21 White	120.2	180.3	240.4	360.6	480.8	601.0	721.2	961.5
	ECS27 Black	133.4	200	266.7	400.1	533.5	666.8	800.2	1066.9
	EH391 Undercoat Hardener	161.4	242.1	322.8	484.3	645.7	800.6	968.5	1291.3
	DT1855 Compliant Reducer	191.3	286.9	382.6	573.9	765.1	948.8	1147.7	1530.3
G5	ECS21 White	96.2	144.2	192.3	288.5	384.6	480.4	576.9	769.2
	ECS27 Black	133.0	199.6	266.1	399.1	532.2	665.2	798.2	1064.3
	EH391 Undercoat Hardener	161.1	241.6	322.2	483.3	644.4	799.0	966.6	1288.7
	DT1855 Compliant Reducer	191.0	286.4	381.9	572.9	763.8	947.2	1145.8	1527.7
G6	ECS21 White	37.4	56.1	74.8	112.2	149.9	187	224.4	299.1
	ECS27 Black	132.2	198.4	264.5	396.7	529.0	661.2	793.4	1057.9
	EH391 Undercoat Hardener	160.3	240.4	320.6	480.9	641.2	795.1	961.8	1282.4
	DT1855 Compliant Reducer	190.2	285.2	380.3	570.5	760.6	943.2	1141	1521.3

Technical Data		
	ECS2x : EH391 : DT1855	ECS2x : EH391 : DT1855 + SLV814
RTS Combinations	4 : 1 : 1	4 : 1 : 1+10%
Applicable Use Category	Primer	Primer
VOC Actual (g/L)	95	90
VOC Actual (lbs./ US gal.)	0.80	0.75
VOC Regulatory (g/L) (less water less exempt)	218	210
VOC Regulatory (lbs./ US gal.) (less water less exempt)	1.82	1.75
Density (g/L)	1372 - 1431	1359 - 1412
Density (lbs./ US gal.)	11.45 - 11.94	11.34 - 11.78
Volatiles wt. %	57.4 - 59.4	58.7 - 60.5
Water wt. %	0.0	0.0
Exempt wt. %	50.5 - 52.7	52.1 - 54.1
Water vol. %	0.0	0.0
Exempt vol. %	56.6	57.3

HEALTH AND SAFETY

See 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 SDS 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 SDS 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.
- 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.
- Wear appropriate PPE such as eye and skin protection. In the event of injury, see first aid procedures on SDS.
- 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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