

**3.5 VOC Epoxy Primer – White/Gray**

# ESU420/421

ESU420/421 Epoxy Primers combine the speed and versatility of conventional solids Epoxy Primers with 3.5 VOC compliance. These products have been formulated to provide corrosion protection over properly prepared substrates. ESU Epoxy Primers are available in white (420) and gray (421).

<b>Additional Products</b>		<b>Compatible Surfaces</b>
Hardener for ESU420 and ESU421	ESU429	ESU420/ESU421 may be applied over: <ul style="list-style-type: none"> <li>• Properly prepared steel</li> <li>• Properly prepared aluminum</li> <li>• Properly prepared galvanized</li> <li>• Properly prepared fiberglass</li> <li>• Properly prepared OE Enamel Finishes</li> </ul> If sanding bare metal prior to application of ESU420/ESU421, use 180-240 grit wet or dry. Sand old finishes with 320-400 grit wet or dry.
Reducer for ESU420 and ESU421	ESR300 Fast ESR310 Medium	
<b>Selection of Substrate Cleaner</b>		
<b>Code</b>	<b>Product</b>	<b>Purpose</b>
DX436	Wax & Grease Remover	Suitable for removing dirt, grease or other contaminants before or during the painting process.
DX437	Heavy-Duty Wax & Grease Remover	Used to remove heavy milling oils and grease from bare substrates prior to the painting process.

## Application Guide

### Preparation:



- Wash the area to be painted with soap and water, and then clean with DX436 or DX437 wax and grease remover.



- Sand substrates, then re-clean with DX436 or DX437.



- Prime aluminum, stainless and carbon steel immediately after cleaning.

### Mixing Ratio:



3 : ESU420/ESU421  
1 : ESU429  
1 : ESR300/ESR310

### Pot Life:



6 – 8 hours after mixing at 77°F (25°C).  
Mix only enough material that can be used in 6 – 8 hours.

**NOTE:** Heat shortens pot life of this material.

### Additives:



N/A

### Spray Gun set-up:



	HVLP	Conventional
Fluid Tip	1.2 – 1.4 mm or equivalent	1.4 – 1.6 mm
Air Pressure	8 – 10 PSI at the cap	40 – 50 PSI at spray gun

### Number of Coats:



1-2 coats

### Total Film Build Per Coat

	Wet	Dry
Minimum	3.5 mils	1.2 mils
Maximum	5.5 mils	2.0 mils

### Flash Time at 70°F (21°C):



Between coats 10-15 minutes

### Dry Times:



To Touch: 15 minutes Air Dry at 70°F (21°C)  
To Handle: 30 minutes  
Dry: 4 hours  
Force Dry: 30 minutes at 140°F (60°C)  
To Topcoat: 1 hour at 70°F (21°C)

After 4 days, sand ESU420/ESU421 with 400 grit (wet or dry) before proceeding to the next undercoat or topcoat.

**NOTE:** Force drying times are for quoted surface temperature. Additional time should be allowed in the force-drying schedule to allow surface to reach recommended temperature.

### Physical Characteristics:

Color:	ESU420 White ESU421 Gray
RTS Combinations:	ESU420/1:ESU429 :ESR3X0
Volume Ratio:	3 : 1 : 1
Applicable Use Category	Primer Sealer
VOC Actual (g/L)	235
VOC Actual (lbs/gal)	1.96
VOC Regulatory (less water less exempt) (g/L)	409
VOC Regulatory (less water less exempt) (lbs/gal)	3.41
Density (g/L)	1304
Density (lbs/gal)	10.88
Volatiles wt. %	54.2
Water wt. %	0.0
Exempt wt. %	36.2
Water vol. %	0.0
Exempt vol. %	42.7
Solids vol. %	29.6
Theoretical sq. ft. coverage (per RTS U.S gallon, 1 mil at 100% transfer efficiency)	475

## Health and Safety

Please refer to Material Safety Data Sheets (MSDS) for full health safety details and storage regulations.

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 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.

## PPG Industries

### Commercial Coatings

*We're Everywhere You Look*

#### PPG Industries

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

#### PPG Canada Inc.

2301 Royal Windsor Drive  
Mississauga, Ontario L5J 1K5  
1-888-310-4762