

3.5 VOC Epoxy Primers - White/Gray

ESU420/421

ESU420 3.5 VOC Epoxy Primer – White and ESU421 3.5 VOC Epoxy Primer – Gray combine the speed and versatility of conventional solids epoxy primers with 3.5 VOC compliance. These products are formulated to provide corrosion protection over properly prepared substrates.

Additional Products

- | | |
|----------------------------------|------------------------------|
| • Hardener for ESU420 and ESU421 | ESU428 |
| • Reducers for ESU420 and ESU421 | ESR300 Fast
ESR310 Medium |

Compatible Surfaces

ESU420/ESU421 may be applied over:

- Properly prepared steel
- Properly prepared aluminium
- Properly prepared galvaneal
- Properly prepared galvanized
- Properly prepared fiberglass
- Properly prepared OE Enamel Finishes

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.

Selection of Substrate Cleaner - ONECHOICE® Commercial CFX Cleaners

Code	Product	Purpose
CFX435LV	Low VOC Cleaner	Compliant cleaner suitable for removing dirt, grease or other contaminants before or during the painting process
CFX436	Wax & Grease Remover	Suitable for removing dirt, grease or other contaminants before or during the painting process.
CFX437	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 CFX435LV, CFX436 or CFX437 cleaner.



- Sand substrates, then re-clean with CFX435LV or CFX436 cleaner.

- Prime all substrates immediately after cleaning.

Number of Coats:



1 – 2 coats

Film Build:

Wet Film
(per coat)

Dry Film
(total)

Minimum
Maximum

3.5 – 4.0 mils

1.2 mils
2.0 mils

Mixing Ratio:



3 : ESU420/421
1 : ESU428
1 : ESR300/ESR310

Flash Time:



Between coats 10 – 15 minutes
@ 70°F (21°C)

Pot Life:



6-8 hours after mixing @ 70°F (21°C)/50% RH
Mix only enough material that can be used in 6-8 hours

NOTE: Heat shortens pot life of this material.

Dry Times:



To Touch: 20 minutes @ 70°F (21°C)

To Handle: 30 minutes @ 70°F (21°C)

To Tape: 3 - 4 hours @ 70°F (21°C)



Flash prior to Bake: 5 - 10 minutes @ 70°F (21°C)



Force Dry*: 15 minutes @ 140°F (60°C)*



To Recoat**:
(with itself) Minimum: 1 hour
Maximum: 4 days
@ 70°F (21°C)

To Topcoat***:
(with ESSS color) Minimum: 1 hour
Maximum: 24 hours***
@ 70°F (21°C)

Spray Viscosity:



#2 EZ-Zahn 20 – 25 seconds

Additives:



N/A

Spray Gun Setup:

HVLP

COMPLIANT



Fluid Tip

1.3 - 1.6 mm
or equivalent

1.4 - 1.6 mm
or equivalent

Air Pressure

8-10 PSI at
the air cap

35-50 PSI at the
spray gun

Pressure Pot Setup: Starting setup, adjust from here for best results

HVLP

COMPLIANT



Fluid Tip

1.0 - 1.4 mm

1.0 - 1.4 mm

Fluid
Delivery

10-12 fluid
ounces per
minute

10-12 fluid
ounces per
minute

***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.

****Note: Recoating** – If not recoated with itself after 4 days, sand ESU420/ESU421 with 400 grit (wet or dry) before proceeding to the next undercoat or topcoat.

*****Note: Topcoating** – If not topcoated with ESSS Color within 24 hours, sand with 400 grit (wet or dry) before topcoating.

Application Guide (continued)

Test Properties:

Color	ESU420 White / ESU421 Gray
VOC RTS Applied	Maximum 3.50 lbs. per U.S. Gallon
VOC per Gallon of Coatings Solids	6.40 lbs.
Volume Solids (RTS)	31.8 %
Square Foot Coverage (RTS US Gal 100% Transfer Efficiency)	510 sq. ft. @ 1 mil

Health and Safety:

Safety Data Sheets (SDS) for the PPG products mentioned in this publication are available through www.ppgcommercialcoatings.com (Safety, SDS Search) or your PPG Distributor.

For additional information regarding this product, see the SDS and LABEL information.

EMERGENCY MEDICAL OR SPILL CONTROL INFORMATION (412) 434-4515; IN CANADA (514) 645-1320 AND IN MEXICO 01-800-00-21-400.

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