

2.1 VOC Epoxy Primers - Gray/White/Black

ESU480/ESU481/ESU482

DELFLLEET ESSENTIAL[®] ESU480, ESU481 and ESU482 are 2.1 VOC epoxy primers that offer exceptional adhesion over a wide array of substrates. ESU480, ESU481 and ESU482 are non-sanding primers that provides a smooth finish and fast topcoat times, making this the product of choice in high productivity shops.

Additional Products

- 2.1 VOC Epoxy Primer - Gray ESU480
- 2.1 VOC Epoxy Primer - White ESU481
- 2.1 VOC Epoxy Primer - Black ESU482
- 2.1 VOC Epoxy Hardener ESU489

Compatible Surfaces

ESU480, ESU481 and ESU482 may be applied over:

- Properly prepared steel
- Properly prepared stainless steel
- Properly prepared aluminum
- Properly prepared galvanized
- Properly prepared galvaneal
- Properly prepared fiberglass
- Properly prepared OE enamel finishes

Surface Preparation:

When sanding bare metal prior to application of ESU480/ESU481/ESU482, use 80 grit (stainless steel) or 120-180 grit (steel and aluminum). Sand old finishes with 220-320 grit wet or dry.

Always use fresh sandpaper and thoroughly clean all substrates after sanding.

Aluminum, stainless steel and carbon steel must be primed immediately after cleaning and sanding.

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 CFX436 or CFX437 wax and grease remover.



- Follow sanding recommendations on page one for substrate preparation, then re-clean with CFX435LV or CFX436 cleaner.

- Prime all substrates immediately after cleaning.

Number of Coats:



1 - 2 coats

Film Build:

Minimum
Maximum

Wet Film
(per coat)

2.3 mils
6.8 mils

Dry Film
(total)

1.0 mil
3.0 mils

Mixing Ratio:



4 : ESU480/481/482
1 : ESU489

Pot Life:



Pot life of this product is variable depending on temperature and on activator choice.

4 hours after mixing @ 70°F (21°C)/50% RH

NOTE: Heat shortens pot life of this material.

Spray Viscosity:



#2 EZ-Zahn 25 seconds

Additives:



N/A

Spray Gun Setup:

HVLP

COMPLIANT



Fluid Tip	1.3 - 1.5 mm or equivalent	1.3 - 1.5 mm or equivalent
Air Pressure	10 PSI at the air cap max	35 PSI at the spray gun

Pressure Pot Setup:

HVLP

COMPLIANT



Fluid Tip	1.3 - 1.5 mm	1.3 - 1.5 mm
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Fluid Delivery	10-12 fluid ounces per minute	10-12 fluid ounces per minute
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Flash Time:



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

Dry Times:



To Touch: 15 minutes @ 70°F (21°C)

To Handle: 90 minutes @ 70°F (21°C)



To Tape: 3-4 hours @ 70°F (21°C)



Flash prior to force dry: 10-15 minutes @ 70°F (21°C)

Force Dry: 25 minutes @ 140°F (60°C)



Overcoat / Topcoat:* 30-45 minutes @ 70°F (21°C)

**After 4 days, sand ESU480/481/482 with 400 grit (wet or dry) before proceeding to the next undercoat or topcoat. Do not sand to below minimum dry film thickness over bare metal.*

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.

Test Properties:

ESU480/ESU481/ESU482 (packaged)

Wt. % Solids 56.1-56.2%

Vol. % Solids 40.1-40.4%

In sq. ft. /U.S. gal. 704 sq. ft. @ 1 mil dry

Ready-to-spray (RTS), giving 1 mil. (25µm) dry film thickness (Assuming 100% Transfer Efficiency). 4:1 mix ratio

Application Guide (continued)

Test Properties:

RTS Combinations:	ESU480/ESU481/ESU482 : ESU489
Volume Ratio	4 : 1
Applicable Use Category	Primer /Primer Sealer
VOC Actual	153 (g/L)
VOC Actual	1.28 (lbs/gal)
VOC Regulatory (less water less exempt)	250 (g/L)
VOC Regulatory (less water less exempt)	2.09 (lbs/gal)
Density	1370-1372 (g/L)
Density	11.43-11.45 (lbs/gal)
Volatiles wt.	43.6-43.7%
Water wt.	0.1%
Exempt wt.	32.2-32.5%
Water vol.	0.1%
Exempt vol.	38.5-38.8%
Solids wt.	56.3-56.4%
Solids vol.	43.6-43.9%

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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