

**Urethane Clear**

# ESC600

DELFLIET ESSENTIAL<sup>®</sup> ESC600 is a cost-effective, 2-component, acrylic urethane clearcoat that delivers good gloss, DOI and buffability, while providing an added layer of durability and protection from the environment. ESC600 has a VOC of 4.1 lbs/gallon and uses the same hardeners and activators as the current ESSS product line. ESC600 may be used as an integrating clear in *Delfleet Essential* ESSS Single Stage Color.

**Additional Products**

- |                        |        |
|------------------------|--------|
| • Urethane Clear       | ESC600 |
| • Hardener             | ESH200 |
| • Fast Activator       | ESX500 |
| • Standard Activator   | ESX510 |
| • Slow Activator       | ESX520 |
| • Very Slow Activator  | ESX530 |
| • Extra Slow Activator | ESX540 |

**Compatible Surfaces**

*ESC600 may be applied over:*

- ESSS Basecoat Color
- ESSS Single Stage Color

**Selection of Substrate Cleaner - ONECHOICE<sup>®</sup> 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:



Allow the ESSS Basecoat Color to dry a minimum of 30 minutes, up to a maximum of 72 hours, before clearcoating.



Allow the ESSS Single Stage Color to dry a minimum of 30 minutes, up to a maximum of 72 hours before clearcoating. When specific activators are used in the color coat, the clear must be applied before the maximum time shown below:

#### ESSS Single Stage Color

- ESX500/ESX510 3 hours
- ESX520 16 hours
- ESX530 72 hours
- ESX540 Do not Clearcoat

*If the maximum time has expired the color must be sanded before the clear is applied.*

### Mixing Ratio:



6 : ESC600  
1 : ESH200  
1 : ESX5XX

### Pot Life:



Minimum Pot Life is 4 hours

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



RTS Viscosity 16-20 seconds on #2 EZ Zahn

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

### Additives:



N/A

### Spray Gun Setup:

#### HVLP

#### COMPLIANT



Fluid Tip	1.1- 1.4 mm or equivalent	1.3 - 1.7 mm or equivalent
Air Pressure	10 PSI at the air cap	35-45 PSI at the spray gun

Consult the Fleet Training Manual Spray Equipment section for additional gun set-up requirements.

**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	8-12 fluid ounces per minute	8-12 fluid ounces per minute

### Number of Coats:



2 - 3 coats as an overlay clear

1 - 2 coats as an integrating clear in ESSS Single Stage Color only

### Film Build:

	Wet Film (per coat)	Dry Film (total)
Minimum	2.25 mils	1.5 mils*
Maximum	3.75 mils	2.5 mils

\* Although not necessary to do, minimum film build is after sanding and buffing operation, if performed.

### Flash Time:



Between coats

5 - 10 minutes  
@ 70°F (21°C)

### Dry Times:

To Touch:

15 - 30 minutes  
@ 70°F (21°C)

To Handle:

45 minutes to 2 hours  
@ 70°F (21°C)

To Tape:

1.5 - 2 hours @ 70°F (21°C)

Force Dry:

30 minutes @ 140°F (60°C)

IR (Infrared):  
Short Wave

12-15 minutes

Polishing

Air Dry:  
Force Dry:

16 hours @ 70°F (21°C)  
2 hours (after cool down)

To Repair /  
Recoat:

8 hours to overnight before  
sanding

*After 8 hours, sand ESC600 with 600 grit (wet or dry) before applying another coat*

**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.**

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**Application Guide (continued)**

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**Clearcoating Option as an  
integrating clear in Single  
Stage Color:**

Ready-to-spray ESC600 may be mixed (up to 33% by volume) with ready-to-spray ESSS Single Stage Color prior to applying the final coat of color.

The ready-to-spray VOC of the final paint, when adding up to the maximum 33% by volume of ready-to-spray ESC600 to ready-to-spray ESSS Single Stage Color is less than 3.5 lbs/gal.

Note: Use of ESC600 as an integrating clear in metallic ESSS Single Stage Colors may result in a color shift.

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**Test Properties:**

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	<b>Clear:</b>	<b>Integrating Clear*:</b>
Application	(6:1:1)	ESSS Single Stage Color RTS + 25-33% ESC600 RTS
Package VOC Actual	3.57 lbs per U.S. gal. (428 g/L)	3.57 lbs / U.S. gal. (428 g/L)
Package VOC Regulatory (Less Water Less Exempts)	4.48 lbs per U.S. gal. (537 g/L)	4.48 lbs / U.S. gal. (537 g/L)
RTS VOC Regulatory (Less Water Less Exempts)	4.07 lbs per U.S. gal. (488 g/L)	3.00-3.10 lbs / U.S. gal. (359-371 g/L)
Volume Solids (RTS)	33.3%	42.0-45.0%
Square Foot Coverage applied 6: 1: 1 (RTS US Gal 100% Transfer Efficiency)	534 sq. ft. @1 mil	674-722 sq. ft. @1 mil

***\*Compliant in national rule markets. Not compliant as an integrating clear in low VOC markets with CARB SCM based rules that require 2.1 lbs./gal clearcoats.***

The contents of this package must 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 of all components, since the mixture will have the hazards of all its parts. Improper spray technique may result in a hazardous condition. Follow spray equipment manufacturer's instructions to prevent personal injury or fire. Follow directions for respirator use. Wear eye and skin protection. Observe all applicable precautions.

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**Health and Safety:**

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

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

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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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