

DFE-21

# **Polyurethane Basecoat**

# ESSS Basecoat

ESSS Basecoat is an easy-to-use product designed to be mixed from ESSS color formulas, offering a wide array of solid, metallic, and pearl colors. VOC is below 3.5 RTS and is designed for use with ESC621 clearcoat. Essential basecoat can be used over all properly prepared OEM finishes, cured air-dried finishes, and *Delfleet*® Essential primers listed below.

### **Additional Products**

### • Essential Color ESSS

- Hardener ESH210
- Basecoat Converter ESB800

# **Compatible Surfaces**

ESSS Basecoat may be applied over:

- Properly cleaned and sanded OEM enamels and cured finishes
- ESU410 Polyurethane Primer
- ESU420/ESU421 3.5 Epoxy Primer White/Gray
- ESU430 Epoxy Primer
- ESU440 3.5 Primer Surfacer
- ESU460/ESU461/ESU462 4.6 Epoxy Primer Gray/White/Black
- ESU470 2.1 Epoxy Primer

When sanding prior to the application of ESSS basecoat, use 320 grit wet or dry.

# **Selection of Substrate Cleaner**

Code	Product	Purpose
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**

#### Mixing Ratio:



2 ESSS1 ESB8001 ESH210

Hand shake ESB800 before addition

#### Pot Life:



2 hours @ 70°F ( 21°C ) / 50% RH

NOTE: High heat and humidity will shorten pot life

### Pressure Pot Set-up:



HVLP 1.0 - 1.4 mm with 8 - 12 fluid ounces per minute Conventional
1.0 - 1.4 mm with
8 - 12 fluid ounces
per minute

#### Flash Off:



10 - 15 minutes @ 70°F (21°C) before stoving

#### **Total Film Build:**

Wet

2.0 - 4.0 mils per coat 5.0 mils total DFT, Maximum

Dry

Theoretical Coverage: (Color Dependent)

531 - 664 sq. ft.

Theoretical coverage in sq. ft. /US gal. Ready-to-spray (RTS), giving 1mil. (25µm) dry film thickness (assuming 100% Transfer Efficiency)

# Spray Viscosity:



#2 ZAHN CUP = 15 - 30 seconds

Spray gun Set-up:

ray gun

Fluid Tip 1.3 - 1.7 mm Air Pressure 8 - 10 PSI at

0 PSI at 50 - 60 PSI

Conventional

1.3 - 1.7 mm

the cap

**HVLP** 

#### **Number of Coats:**



Spray to hiding: 10 minute flash between coats

## **Dry Times**



Dust-free: 15 - 30 minutes
Tape Time: 2 hours @ 70°F (21°C)
30 minutes @ 140°F (60°C)

Recoat/Clearcoat: Min 30 minutes

Max 72 hours @ 70°F (21°C) before sanding is required

## **Physical Characteristics:**

Total Solids By Weight (RTS) 35.8% - 58.3% Total Solids By Volume (RTS) 33.1% - 41.4%

RTS Combinations:	ESSS color	ESSS: ESB800: ESH210
Volume Ratio:	Package (as is)	2:1:1
Applicable Use Category	Color Coating	Color Coating
VOC Actual (g/L)	248 - 317	208 - 250
VOC Actual (lbs/gal)	2.07 - 2.65	1.74 - 2.10
VOC Regulatory (less water less exempt) (g/L)	317 - 337	351 - 369
VOC Regulatory (less water less exempt) (lbs/gal)	2.65 - 2.81	2.93 - 3.08
Density (g/L)	968 - 1812	1099 - 1528
Density (lbs/gal)	8.08 - 15.12	9.17 - 12.74
Volatiles wt. %	17.5 - 46.7	41.7 - 64.2
Water wt. %	0.0	0.0 - 0.2
Exempt wt. %	0.0 - 22.2	25.3 - 45.1
Water vol. %	0.0	0.0 - 0.2
Exempt vol. %	0.0 - 26.2	28.7 - 42.1

#### **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.

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