

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 ESSS
1 ESB800
1 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	Conventional
1.0 - 1.4 mm with 8 - 12 fluid ounces per minute	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	Dry
2.0 - 4.0 mils per coat	5.0 mils total DFT, Maximum

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:



	HVLP	Conventional
Fluid Tip	1.3 - 1.7 mm	1.3 - 1.7 mm
Air Pressure	8 - 10 PSI at the cap	50 - 60 PSI

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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