



G90 Low VOC Topcoat

Technical Data Sheet (TDS)

Product Description

G90 Low VOC Topcoat is a two component, highly cross-linked, high performance polyester polyurethane coating providing a high gloss surface finish.

Product features:

- Excellent UV Stability, providing long term gloss and color retention
- Outstanding chemical resistance
- Outstanding abrasion resistance
- Outstanding impact resistance
- Solid Colors Only
- VOC Compliant

Recommended Uses

G90 Low VOC Topcoat is intended for industrial applications; either new build or maintenance. G90 Low VOC Topcoat is suitable for application on all Endura primers.

Industries:

- Oilfield & Energy Services
 - Well Service Vehicles
 - Drilling
 - Tanks
- Cranes and Construction Equipment
- Waste and Recycling Industry
 - Garbage Trucks
- Trailers and Rolling Stock

Mix Ratio

2 parts by volume of component A [**CLRGXXXXX**]
(Part Number varies with color)
 1 part by volume of component B [**FUB0502**]

The recommended temperature when mixed is 68-77°F (20-25°C).

Other G90 B components are available for different ambient conditions and application requirements. See: Component B Selector and Mixing Ratios

Please contact your Endura Representative if you have any questions.

Product Characteristics

Gloss:	High: 90+ GU at 60°
Slight gloss variations will occur depending on color.	
Volume Solids Mixed: (Unreduced) CLRG24364: FUB0502 (2:1)	56% ± 4%
Volume solids will vary by color	
Pot Life: (77°F (25°C) and 50% RH)	8-10 Hours
Note: Pot life is reduced when Super Catalyst II is used	
VOC Mixed (Unreduced): EPA Method 24 CLRG24364: FUB0502 (2:1)	400.7 g/l 3.344 lb./gal
All colors are below 420 g/l (3.5 lb./gal) VOC content will vary with each color and specific Component B used	
Shelf Life:	
Component A	3 years
Component B	2 years
For unopened product (77°F (25°C))	

Surface Preparation

G90 Low VOC Topcoat can be applied over all Endura primer sealers and primer surfacers without sanding during their topcoat window. The topcoat window varies with each primer, see the relevant primer technical data sheet for the specific topcoat window data.

If the primer topcoat window has been surpassed, the primer should be sanded with 240 – 280 grit sandpaper to achieve inter coat adhesion. All sanding dust must be blown off prior to application of the topcoat.

Application Method

G90 Low VOC Topcoat can be applied using most spray painting systems.

Note: Ensure that any solvent absorbent primer surfacers are properly sealed with a primer sealer prior to application of the topcoat.



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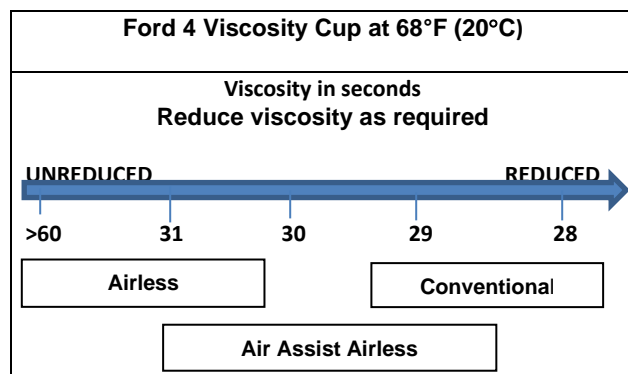
Solid Colors:

Apply two single wet coats allowing up to 30 minutes flash time between coats. It is recommended that a thinner first coat be applied at 1.5 - 2.0 mils wet, followed by a second wet coat of 2.0 - 3.5 mils wet.

Spray Gun Setup

Feed Type	Fluid Tip	Application Pressures (heel of gun)	Fluid Delivery
Siphon Feed	1.6-1.8 mm	40-50 psi	
Gravity Feed	1.3-1.4 mm	30-40 psi	
Pressure Feed	1.0-1.8 mm	50-60 psi	10-14 oz/min
Air Assist Airless	9 -17 Thou	1,000-1,800 psi	
Airless	11-13 Thou	1,700-3,000 psi	

Spray Viscosity



Note: Spraying viscosity and thinning will depend on ambient conditions, spray equipment used, and the desired surface finish.

To maintain VOC compliance, if required, thin with Endura Low VOC topcoat Thinners/Reducers.

Up to 20% with FTH0021 – Low VOC Topcoat Thinner/ Reducer
 Up to 20% with FTH0023 – Slow Low VOC Topcoat Thinner / Reducer

Film Build

G90 Low VOC Topcoat has a recommended film build thickness:

Wet: WFT Unreduced	2.5 – 4.5 mils	64 – 114 microns
Dry: DFT	1.5 – 2.5 mils	38 – 63 microns

Poor hiding colors film build may be higher.

Theoretical coverage at 1.0 mil (25 microns)
 Average DFT: 898 ft² per gallon at 100% transfer efficiency.

Dry Times

	68°F (20°C)	86°F (30°C)	104°F (40°C)
Dust Free	2 Hours	1 Hour	30 Minutes
Full Cure	7 Days	5-6 Days	3-4 Days

Note: Dry Times are subject to ambient conditions (temperature and humidity) and good airflow and film build of the topcoat.

For best results surface temperature must be 86°F (30°C) or less before topcoating.

Maximum re-coat window without sanding is 16 hrs at 68°F (20°C). After 16 hours G90 Low VOC Topcoat must be sanded to achieve inter-coat adhesion. Mechanical sanding with 220 – 320 grit is recommended before topcoating.

Important Note: Ensure that no more than three coats of paint are applied in a 12-hour shift. This includes primer, mid-coat, topcoats, and clear coat. If more than 3 coats have been applied wait 10-12 hours to allow for proper solvent evaporation.

The use of Super Catalyst II with Endura topcoats will accelerate drying times.

For questions about scheduling please contact your Endura Representative.



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Clear Coating Information

G90 Low VOC Topcoat can be topcoated with all Endura clear coats.

If G90 is going to be clear coated the following minimum times before application of the clear coat are recommended:

Solid Colors
4 Hours

The minimum clear coat times are based on based on recommended film build at 68°F (20°C) and 50% RH. The use of Supercatalyst I or II in the EX-2C will reduce these minimum times.

Maximum re-coat window without sanding is 16 hrs at 68°F (20°C). After 16 hours G90 Low VOC Topcoat must be sanded to achieve inter-coat adhesion. Mechanical sanding with 400 grit is recommended before clear coating.

For questions about scheduling please contact your Endura Representative.

Component B Selector

G90 H.A.T. B – For use in high ambient temperatures above 86°F (30°C)

2 part by volume of component A [**CLRGXXXXX**]
 (Part Number varies with color)
 1 part by volume of component B [**FUB0571**]

For questions regarding which component B is right for your application, contact your Endura Representative.

Clean Up

Clean all equipment immediately after use with Endura High Strength Gun Wash, or Endura EX-2C thinner.

Follow manufacturer's safety recommendations when using any solvent.

Ordering Information (sizing)

Available in Gallons and 5 Gal Pails
 Other custom sizes may be available.

3 Mixed Gallons		
Comp A – 2X Part numbers vary by color	CLRGXXXXX-030	1 Gal
Comp B	FUB0502-030	1 Gal

15 Mixed Gallons		
Comp A -2X Part numbers vary by color	CLRGXXXXX-050	5 Gal
Comp B	FUB0502-030	5 Gal

Environmental Conditions

For optimum coating performance product, substrate and ambient temperature should be between 68°F-77°F (20°C-25°C). To prevent condensation during application the surface temperature must be 5°F (3°C) or more above the dew point at all times.

For use outside this range please contact your Endura Representative.

Specifications

Hardness	ASTM D3363	2H
Solvent Resistance	ASTM D4752	100 MEK Rubs; No Failure
Abrasion Resistance (1000 cycles CS-17)	ASTM D4060	50 mg loss
Impact Resistance	ASTM D2794	30 in. lbs; NO failure
Flexibility	ASTM D522	1/3 in. mandrel bend: NO failure
Service Temp	-40°F to 360°F	-40°C to 182°C



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Safety Precautions

Please refer to all Safety Data Sheets (SDS) before using this product. SDS sheets can be found on our website at www.polyglasscoatings.com.