

## UltraFlex Clear

### Technical Data Sheet (TDS)

#### Product Description

**UltraFlex Clear** is a two component highly cross-linked, high performance polyester polyurethane coating providing exceptional flexibility.

#### Product features:

- Exceptional flexibility
- Outstanding chemical resistance
- Outstanding abrasion resistance
- Outstanding impact resistance
- Adds extra protection against mechanical damage
- High gloss

#### Recommended Uses

UltraFlex Clear is intended for industrial applications, either new build or maintenance.

UltraFlex Clear is suitable for application on EX-2C Topcoat.

#### 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

##### Regular Component B

1 part by volume of component A [FUA0204]

1 part by volume of component B [FUB0022]

##### Low VOC Component B

1 part by volume of component A [FUA0204]

1 part by volume of component B [FUB0141]

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

#### Product Characteristics

<b>Gloss: High:</b>	High: 90+ GU at 60°
<b>Volume Solids Mixed: Regular B (Unreduced) FUA0204: FUB0022 (1:1)</b>	43% ± 2%
<b>Volume Solids Mixed: Low VOC B (Unreduced) FUA0204: FUB0141 (1:1)</b>	44% ± 2%
<b>Pot Life:</b> (77°F (25°C) and 50% RH)	8-10 Hours
<b>Note: Pot life is reduced when Super Catalyst II is used</b>	
<b>VOC Mixed (Unreduced): Regular B EPA Method 24 FUA0204: FUB0022 (1:1)</b>	497 g/l 4.150 lb /gal
<b>VOC Mixed (Unreduced): Low VOC B EPA Method 24 FUA0204: FUB0141 (1:1)</b>	360 g/l 3.005 lb /gal
<b>Shelf Life:</b>	
<b>Component A</b>	3 years
<b>Component B</b>	2 years
<b>For unopened product (77°F (25°C))</b>	

#### Surface Preparation

UltraFlex Clear can be applied on EX-2C Topcoat colors without sanding during the topcoat window.

Ensure that surfaces to be clear coated are free of flaws, surface contaminants and other surface imperfections.

If the UltraFlex Clear has been allowed to cure longer than 24 hours, sanding will be required to achieve inter-coat adhesion. Sand the topcoat lightly with 400 grit sandpaper or maroon/grey scuff pads.

#### Note:

- **Do not sand metallic or pearl colors.**
- **Do not mix UltraFlex Clear with metallic color for final coat.**
- **Do not mix UltraFlex Clear into the final color coat on solid colors.** This may cause matching and repeatability issues.

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#### Application Method

UltraFlex Clear can be applied using most spray-painting systems.

After application of EX-2C Topcoat wait for the following times before application of UltraFlex Clear:

Solid Colors	Metallic Colors
3-18 Hours	6-18 hours

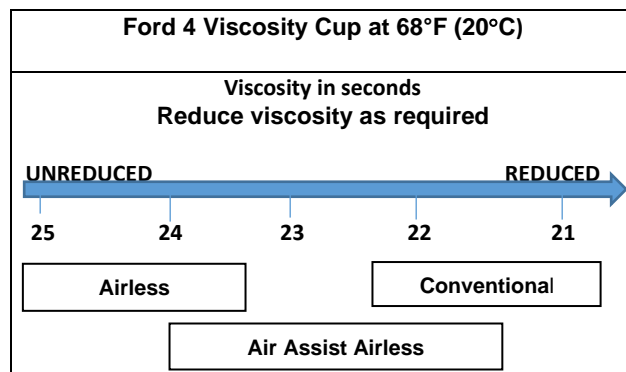
Apply two wet coats of UltraFlex Clear allowing up to 30 minutes between coats.

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

#### 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	1.0-1.4 mm	50-60 psi	10-14 oz/min
Air Assist Airless	9 -13 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.

If required, recommended spraying viscosity is achieved by reducing with one of the desired Endura topcoat thinner/ reducer.

#### Regular VOC thinners/reducers

FTH0086 – EX-2C Thinner  
FTH0090 – Slo EX-2C Thinner  
FTH0014 – Medium Topcoat Reducer

#### Low VOC thinners/reducers

FTH0021 – Low VOC Topcoat Thinner/ Reducer  
FTH0023 – Slow Low VOC Topcoat Thinner / Reducer

#### Film Build

UltraFlex Clear has a recommended film build thickness of:

#### UltraFlex Clear:

<b>Wet: WFT</b>	<b>6.0 – 12.0 mils</b>	<b>150 – 300 microns</b>
<b>Unreduced</b>		
<b>Dry: DFT</b>	<b>3.0 – 6.0 mils</b>	<b>75 - 150 microns</b>

Higher film builds will require multiple coats. Contact your Endura Representative for more information.

Theoretical coverage at 1.0 mil (25 microns)  
Average DFT: 691 ft<sup>2</sup> per gallon at 100% transfer efficiency.

#### Dry Times

	68°F(20°C)	86°F(30°C)	104°F(40°C)
<b>Dust Free</b>	2 Hours	1 Hour	30 Minutes
<b>Full Cure</b>	7-9 Days	5-6 Days	3-4 Days

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

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

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

**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 three coats have been applied wait 10-12 hours to allow for proper solvent evaporation.

For questions about scheduling please contact your Endura Representative.

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#### 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 Pints, Quarts, Gallons and 5 Gal Pails  
Other custom sizes may be available.

1 mixed quart (946ml)		
Comp A	FUA0204-010	1 pint (473ml)
Comp B (Regular)	FUB0022-010	1 pint (473ml)
Comp B (Low VOC)	FUB0141-010	1 pint (473ml)

2 mixed quarts (1.89l)		
Comp A	FUA0204-020	1 quart (946 ml)
Comp B (Regular)	FUB0022-020	1 quart (946 ml)
Comp B (Low VOC)	FUB0141-020	1 quart (946 ml)

2 mixed gallons (7.56l)		
Comp A	FUA0204-030	1 gallon (3.78l)
Comp B (Regular)	FUB0022-030	1 gallon (3.78l)
Comp B (Low VOC)	FUB0141-030	1 gallon (3.78l)

10 mixed gallons (37.8l)		
Comp A	FUA0204-050	5 gallons (18.9l)
Comp B (Regular)	FUB0022-050	5 gallons (18.9l)
Comp B (Low VOC)	FUB0141-050	5 gallons (18.9l)

#### 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	<10 mg loss *varies by color
Impact Resistance	ASTM D2794	100 in. lbs; Direct, Reverse NO failure
Flexibility	ASTM D522	1/8" mandrel bend: NO failure
Service Temp	-40°F to 360°F	-40°C to 182°C

#### Safety Precautions

Please refer to all Safety Data Sheets (SDS) before using this product. SDS sheets can be found on our website at [www.endurapaint.com](http://www.endurapaint.com).