EX-2C Clear 100

Technical Data Sheet (TDS)

Product Description

Endura EX-2C Clear 100 is a two component highly cross-linked, high performance polyester polyurethane clear coating. EX-2C Clear 100 is a clear coating designed to give extra protection to solid, metallic and pearl colors.

Product features:

- Exceptional ultraviolet light protection
- Exceptional abrasion resistance
- Outstanding chemical resistance
- Outstanding abrasion resistance
- Outstanding impact resistance
- High Gloss

Recommended Uses

Endura EX-2C Clear 100 is intended for industrial applications; either new build or maintenance. EX-2C Clear 100 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
- Marine (above the water line)

Mix Ratio

1 parts by volume of component A [FUA0100]
1 parts by volume of component B [FUB0100]

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

NOTE: that other EX-2C B components are available for different ambient conditions and application requirements. See: Component B Selector and Mixing Ratios
Please contact your sales representative if you have any questions.

Product Characteristics

Gloss: High Gloss 90+ GU at 60 deg.

Volume Solids Mixed: Using Comp B - FUB0100
39% ± 2%

Pot Life: 8-10 Hours at 77°F (25°C) and 50% RH

Note: Pot life is reduced when Supercat II is used

VOC Mixed (Unreduced): (EPA Method 24):
Clear 100: Comp B FUB0100 529 g/l (4.419 lb/gal)

Note: VOC content will vary with specific Component B utilized.

Shelf Life:
Component A: 3 years at 77°F (25°C)
Component B: 2 years at 77°F (25°C)

Note: For unopened product

Surface Prep

EX-2C Clear 100 can be applied on EX-2C Topcoat colors without sanding during their topcoat window.

Ensure that surfaces to be clear coated are free of flaws, surface contaminants and other surface imperfections.
If the EX-2C Topcoat 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 Clear 100 with metallic color for final coat.
- Mix clear into final color coat on solid colors. This may cause matching and repeatability issues. Ensure opacity is achieved in previous coat.

**Application Method**

Apply two wet coats of EX-2C Clear 100 allowing up to 30 minutes between coats.

After application of EX-2C Topcoat wait:

**Solid Colors:**
3 - 18 hours before applying Clear 100

**Metallic Colors:**
6 - 18 hours before applying Clear 100

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

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

**Spray Gun Setup**

<table>
<thead>
<tr>
<th>Feed Type</th>
<th>Fluid Tip</th>
<th>Application Pressures (heel of gun)</th>
<th>Fluid Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siphon Feed</td>
<td>1.6-1.8 mm</td>
<td>40-50 psi</td>
<td></td>
</tr>
<tr>
<td>Gravity Feed</td>
<td>1.3-1.8 mm</td>
<td>30-40 psi</td>
<td></td>
</tr>
<tr>
<td>Pressure Feed</td>
<td>1.0-1.4 mm</td>
<td>55-65 psi</td>
<td>10-14 oz/min</td>
</tr>
<tr>
<td>Air Assist Airless</td>
<td>9-13 Thou</td>
<td>1,000-1,800 psi</td>
<td></td>
</tr>
<tr>
<td>Airless</td>
<td>11-13 Thou</td>
<td>1,700-3,000 psi</td>
<td></td>
</tr>
</tbody>
</table>

**Spray Viscosity**

Using a Ford 4 Cup (White)

<table>
<thead>
<tr>
<th>14 Seconds</th>
<th>Reduce as necessary*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td>Airless</td>
</tr>
</tbody>
</table>

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.

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

**Film Build**

EX-2C Clear 100 has a recommended film build thickness of:

- Wet (unreduced): 2.5 – 5.0 mils wet (64 – 127 microns)
- Dry: 1.0 – 2.0 mils DFT (25 – 50 microns)

Theoretical coverage at 1.0 mil (25 microns)
DFT: 633ft² per gallon at 100% transfer efficiency.

**Dry Times**

<table>
<thead>
<tr>
<th></th>
<th>68°F (20°C)</th>
<th>86°F (30°C)</th>
<th>104°F (40°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust Free</td>
<td>2 Hours</td>
<td>1 Hour</td>
<td>30 Minutes</td>
</tr>
<tr>
<td>Full Cure</td>
<td>7-14 days</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Note: The use of Super Catalyst II with Endura topcoats will accelerate drying times.
For best results surface temperature must be 86°F (30°C) or less 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.

For questions about scheduling please contact your Endura representative.

### Component B Selector

**EX-2C Low VOC B** – For use when VOC compliance is required such as rebrand repaint situations

1 parts by volume of component A [FUA0100]
1 parts by volume of component B [FUB0112]

*Note: EX-2C Clear 100 with Low VOC B is not VOC compliant*

**EX-2C H.A.T. B** – For use in high ambient temperatures above 86°F (30°C)

1 parts by volume of component A [FUA0100]
1 parts by volume of component B [FUB0071]

**EX-2C Electrostatic B** – For use with electrostatic spraying units:

1 parts by volume of component A [FUA0100]
1 parts by volume of component B [FUB0103]

**EX-2C Special B** – For use when higher viscosity is required for brush and roll applications.

2 parts by volume of component A [FUA0100]
1 parts by volume of component B [FUB0101]

*Note: For further information on EX-2C with Special B refer to the Technical data sheet.*

**EX-2C California B** – A Zero VOC B for the most stringent of VOC emission standards.

1 parts by volume of component A [FUA0100]
1 parts by volume of component B [FUB0111]

*Note: EX-2C Clear 100 with EX-2C California B is not VOC compliant.*

**EX-2C Low VOC A.C.T. B** – For use when speed is critical for multiple color striping.

1 parts by volume of component A [FUA0100]
1 parts by volume of component B [FUB2100]

*Note: EX-2C Clear 100 with EX-2C Low VOC A.C.T. B is not VOC compliant.*

*Note: For further information on EX-2C Low VOC A.C.T. B refer to the Technical data sheet.*

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, Endura epoxy reducer or Endura EX-2C thinner.

Follow manufacturer's safety recommendations when using any solvent.
EX-2C Clear 100  

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Ordering Information (sizing)

Available in Pints, Quarts, Gallons, 5 Gallon Pails. Other custom sizes may be available.

### 1 Quart

- **Comp A** FUA0100-010 1 Pt.
- **Comp B** FUB0100-010 1 Pt.

### 2 Quarts

- **Comp A** FUA0100-020 1 Qt.
- **Comp B** FUB0100-020 1 Qt.

### 2 Gallons

- **Comp A** FUA0100-030 1 Gal.
- **Comp B** FUB0100-030 1 Gal.

### 10 gallons

- **Comp A** FUA0100-050 5 Gal
- **Comp B** FUB0100-050 5 Gal

### Specifications

<table>
<thead>
<tr>
<th>Property</th>
<th>Standard</th>
<th>Value</th>
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<tbody>
<tr>
<td>Hardness</td>
<td>ASTM D3363</td>
<td>4H</td>
</tr>
<tr>
<td>Solvent Resistance</td>
<td>ASTM D4752</td>
<td>100 MEK Rubs; No Failure</td>
</tr>
<tr>
<td>Impact resistance</td>
<td>ASTM D2794</td>
<td>80 in. lbs; No failure</td>
</tr>
<tr>
<td>Taber Abrasion (1000 cycles CS-17)</td>
<td>ASTM D4060</td>
<td>25 mg loss</td>
</tr>
<tr>
<td>Flexibility</td>
<td>ASTM D522</td>
<td>1/8 mandrel bend; No failure</td>
</tr>
<tr>
<td>Service Temp</td>
<td>-40°C to +182°C</td>
<td>-40°F to 360°F</td>
</tr>
</tbody>
</table>

### Safety Precautions

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

### 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.

**Note:** For use outside this range please contact your Endura Representative.