



EP-521 Low VOC Primer

Technical Data Sheet (TDS)

Product Description

Endura EP-521 Low VOC Primer is a high solids two-component low VOC epoxy primer. It provides excellent corrosion resistance combined with superior impact resistance.

Product features:

- Available in multiple colors
- Ability to fill a sandblast profile in one coat
- Formulated for use where high impact resistance is required.
- Quick dry time and a 3 day topcoat window.
- No induction required.
- **VOC Compliant**

Recommended Uses

Endura EP-521 Low VOC Primer is intended for industrial applications; either new build or maintenance. EP-521 Low VOC Primer is suitable for application on steel, aluminum, stainless steel, fiberglass, and other ferrous metals. This primer must be topcoated to achieve the best results.

EP-521 Low VOC Primer is not recommended in thin films as a sealer.

Industries:

- Oilfield & Energy Services
 - Well Service vehicles
- Cranes and Construction Equipment
- Trailers
- Waste and Recycling Industry
 - Garbage Trucks

Mix Ratio

5 parts by volume of component A
[Part Number varies with color]

1 part by volume of component B [FEB0850]

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

Product Characteristics

Finish: Low Gloss

Volume Solids Mixed: 56% ± 2% (varies with color)

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

Note: Pot Life will be shortened with the use of Endura EpoCat

VOC Mixed (Unreduced)(EPA Method 24):
White: 237 g/l (1.984lbs/gallon)

Note: All colors are below 250g/l. VOC levels will vary per color

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

Surface must be free of all contaminants such as dust, oil, grease and salt. It is recommended that all steel and other ferrous surfaces be sandblasted a minimum of SSPC- SP6 or mechanically sanded with 80 grit sand paper.

All other substrates refer to the Endura recommended surface preparation instruction sheets or contact your Endura representative.

Application Method

EP-521 Low VOC Primer can be applied using most spray systems, although electrostatic sprayers are not recommended.

Apply 1-2 coats as required to achieve the desired film thickness. Allow sufficient flash time between coats especially with higher film builds applied (20-30mins)



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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 | 1.6-1.8 mm | 30-40 psi | |
| Pressure Feed | 1.4-1.8 mm | 50-60 psi | 12-16 oz/min |
| Air Assist Airless | 13-15 Thou | 1,000-1,800 psi | |
| Airless | 13-15 Thou | 1,700-3,000 psi | |

Spray Viscosity

Using a Ford 4 Cup (White)

| | |
|----------------|---------|
| 22-23 Seconds* | N/A* |
| ←————→ | |
| Conventional | Airless |

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

To maintain VOC compliance, thin EP-521 LVOC primer with Endura Low VOC Epoxy Reducers.

VOC content of the following Reducers: (0g/l, 0 lbs/gal)

[FTH0016] Low VOC Epoxy Reducer – Regular

[FTH0027] Low VOC Epoxy Reducer - Slow

Film Build

Endura EP-521 Low VOC Epoxy Primer has a recommended film build thickness of:

**Wet (unreduced): 5.0 – 9.0 mils wet
(125-230 microns)**

Dry: 3.0 – 5.0 mils dry (75-125 microns)

Note: The recommended dry film thickness is above the blast/ sanding profile

Theoretical coverage at 1.0 mil (25 microns)
DFT: 901 ft² per gallon at 100% transfer efficiency.

Dry Times

| | 68°F (20°C) | 86°F (30°C) | 104°F (40°C) |
|------------------|-------------|-------------|--------------|
| Topcoat | 3 Hours | 2 Hours | 1-2 Hours |
| Full Cure | 7-9 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 primer.

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

Maximum re-coat window without sanding is 3 Days at 68°F (20°C)

Recommended Sanding 180 – 220 grit after the topcoat window has been exceeded.

If EpoCat is used, it has a topcoat window of 12 hours maximum.

If the substrate crosses the dew point, there is potential for the primer film to absorb moisture and cause adhesion problems leading to delamination. Booth temperature should be maintained between prime coat and topcoat to avoid this issue.

For improved scheduling please contact your Endura Representative.

Topcoating Information

EP-521 Low VOC Primer can be topcoated with the entire range of Endura topcoat products.

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.



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Ordering Information (sizing)

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

| 1 Gallon | | |
|--------------------|-------------|-------|
| Comp A – White #1 | FEA0851-035 | 3.15L |
| Comp A - Green #15 | FEA0852-035 | 3.15L |
| Comp A - Blue #20 | FEA0853-035 | 3.15L |
| Comp A – Black #1 | FEA0854-035 | 3.15L |
| Comp A – Beige#1 | FEA0855-035 | 3.15L |
| Comp A – Red #25 | FEA0857-035 | 3.15L |
| Comp A – Red #26 | FEA0859-035 | 3.15L |
| Comp B | FEB0850-022 | 0.63L |

| 5 Gallons | | |
|--------------------|-------------|--------|
| Comp A – White #1 | FEA0851-055 | 15.75L |
| Comp A - Green #15 | FEA0852-055 | 15.75L |
| Comp A - Blue #20 | FEA0853-055 | 15.75L |
| Comp A – Black #1 | FEA0854-055 | 15.75L |
| Comp A – Beige#1 | FEA0855-055 | 15.75L |
| Comp A – Red #25 | FEA0857-055 | 15.75L |
| Comp A – Red #26 | FEA0859-055 | 15.75L |
| Comp B | FEB0180-035 | 3.15L |

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.

Specifications

| | | |
|--------------------|------------|-----------------------------------|
| Solvent Resistance | ASTM D4752 | 50 MEK Rubs; No Failure |
| Impact resistance | ASTM D2794 | 40 in. lbs; NO failure |
| Flexibility | ASTM D522 | 3/8 mandrel bend: NO failure |
| Service Temp Range | | -40°C to +121°C -40°F to 250°F |

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.