

## EP-521 Primer

### Technical Data Sheet (TDS)

#### Product Description

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

#### Product features:

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

#### Recommended Uses

Endura EP-521 Primer is intended for industrial applications; either new build or maintenance. EP-521 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 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 [FEA0529]  
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:** 54% ± 1%

**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):  
Grey: 370 g/l (3.095lbs/gallon)

**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 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	9-13 Thou	1,000-1,800 psi	
Airless	11-13 Thou	1,700-3,000 psi	

#### Spray Viscosity

Using a Ford 4 Cup (White)

22 Seconds*	Reduce as necessary*
Conventional	Airless

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

If required thin EP-521 with Endura Epoxy Reducers.  
[FTH0654] Epoxy Reducer - Fast (for use in lower ambient temps)  
[FTH0653] Epoxy Reducer - Regular (for use in average temps)  
[FTH0652] Epoxy Reducer - Slow (for use in higher ambient temps)

#### Film Build

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

**Wet (unreduced): 5.5 – 9.0 mils wet  
(140 – 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: 862 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>Topcoat</b>	3 Hours	2 Hours	1-2 Hours
<b>Full Cure</b>	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 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 – Grey	FEA0529-035	3.15L
Comp B	FEB0850-022	0.63L

5 Gallons		
Comp A – Grey	FEA0529-055	15.75L
Comp B	FEB0850-035	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](http://www.endura.ca).