

EP HiBuild Primer

Technical Data Sheet (TDS)

Product Description

EP HiBuild Primer is a high solid, high build, two-component epoxy primer. EP HiBuild Primer is ideally suited for heavy industrial uses and/or waterproofing requirements.

Product features:

- Proven for heavy industrial applications
- Waterproof capability at 10 mils dry film thickness
- High solids provide quick film build
- Excellent alkali and salt spray resistance
- VOC compliant

Recommended Uses

EP HiBuild Primer is intended for industrial applications, either new build or maintenance. It is suitable for application on steel, aluminum, stainless steel, fiberglass, other ferrous metals, and fiberglass reinforced plastics. This primer must be topcoated to achieve the best results.

Industrial Applications:

- Offshore Drilling Rigs
- Pulp Mills and Chemical Plants
- Boats and Marine
- Bridges

This primer is not suitable for automotive applications.

Product Characteristics

| | |
|--|--------------------------|
| Finish: Medium Gloss | |
| Volume Solids Mixed: (Unreduced) FEA0274: FEB0275 (4:1) | 73% ± 2% |
| Volume solids will vary by color | |
| Pot Life: (77°F (25°C) and 50% RH) | 6 Hours |
| VOC Mixed (Unreduced): EPA Method 24 FEA0274: FEB0275 (4:1) | 245 g/l 2.048 lb /gal |
| VOC will vary with color. All colors are below 250g/l. Use recommended Low VOC reducers to maintain compliance. | |
| Shelf Life: For unopened product (77°F (25°C)) | |
| Component A | 3 years |
| Component B | 2 years |

Surface Preparation

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 40 grit sandpaper.

For use on fiberglass or wood boat hulls, machine sand with 80 grit sandpaper. A minimum of 10 mils (250 microns) dry film thickness is required for waterproofing. EX-2C Topcoat is not recommended below the waterline.

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

Mix Ratio

4 parts by volume of component A [**FEAXXXX**]
(Part Number varies with color)

1 part by volume of component B [**FEB0275**]

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

Application Method

EP HiBuild Primer can be applied using most spray systems, although electrostatic sprayers are not recommended. Apply 2-3 coats as required to achieve the desired film thickness. Allow sufficient flash time between coats especially with higher film builds applied (20-30minutes).

| 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 | |

| Suggested Viscosity Ranges Ford 4 Viscosity Cup at 68°F (20°C) | |
|---|--------------|
| Airless | 47 - 60 secs |
| Air Assist Airless | 45 - 48 secs |
| Conventional | 45 - 47 secs |

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

Recommended spraying viscosity is achieved by reducing with one of the following Endura Low VOC Epoxy reducers up to 25% by volume.

The following reducers will maintain VOC compliance.

[FTH0016] Low VOC Epoxy Reducer- Regular

[FTH0027] Low VOC Epoxy Reducer- Slow

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Film Build

EP HiBuild Primer recommended film thickness:

| | | |
|---------------------------|----------------|-------------------|
| Wet: WFT Unreduced | 5.5 – 8.0 mils | 140 – 203 microns |
| Dry: DFT | 4.0 – 6.0 mils | 102 – 152 microns |

For waterproofing:

| | | |
|---------------------------|-------------|---------------|
| Wet: WFT Unreduced | 13.6 mils + | 345 microns + |
| Dry: DFT | 10 mils + | 254 microns + |

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

Theoretical coverage at 1.0 mil (25 microns)
DFT: 1173 ft² per gallon at 100% transfer efficiency.

Dry Times

| | 68°F(20°C) | 86°F(30°C) | 104°F(40°C) |
|------------------|------------|------------|-------------|
| Topcoat | | | |
| 4 mils | 3 Hours | 2 Hours | 1 Hour |
| 8 mils | 6 Hours | 4 Hours | 2 Hours |
| 12 mils | 12 Hours | 8 Hours | 4 Hours |
| Full Cure | 7-9 Days | 5-6 Days | 3-4 Days |

Dry Times are subject to ambient conditions (temperature and humidity), 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 24 Hrs. at 68°F (20°C). Mechanical sanding with 180 – 220 grit sandpaper is recommended after exceeding the recoat.

For questions about scheduling please contact your Endura Representative.

Topcoating Information

EP HiBuild 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.

Ordering Information (sizing)

| EP HiBuild Primer | 1 1/4 mixed gallons (4.73l) | |
|--------------------|-----------------------------|------------------|
| Comp A – Std White | FEA0270-030 | 1 gallon (3.78l) |
| Comp A – Warm Grey | FEA0274-030 | 1 gallon (3.78l) |
| Comp A - Std Black | FEA0273-030 | 1 gallon (3.78l) |
| Comp B | FEB0275-020 | 1 quart (946ml) |

| EP HiBuild Primer | 5 mixed gallons (18.9l) | |
|--------------------|-------------------------|-------------------|
| Comp A – Std White | FEA0270-054 | 4 gallons (15.1l) |
| Comp A – Warm Grey | FEA0274-054 | 4 gallons (15.1l) |
| Comp A - Std Black | FEA0273-054 | 4 gallons (15.1l) |
| Comp B | FEB0275-030 | 1 gallon (3.78l) |

Other custom sizes may be available

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

| | | |
|---------------------------|----------------|-----------------------------------|
| Solvent Resistance | ASTM D4752 | 100 MEK Rubs; NO Failure |
| Impact resistance | ASTM D2794 | 20 in. lbs; NO Failure |
| Flexibility | ASTM D522 | 7/16 in. mandrel bend: NO failure |
| Service Temp Range | -40°F to 250°F | -40°C to 121°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.