

## HFE3080 Primer

### Technical Data Sheet (TDS)

#### Product Description

**HFE3080** is a low VOC, zinc-rich, epoxy primer. It contains a minimum of 88% zinc in the dry film to provide cathodic protection.

##### Product features:

- Excellent corrosion protection
- Ability to fill a sandblast profile in one coat
- Can provide Cathodic protection
- Agitation is not required while spraying
- Low VOC

#### Recommended Uses

HFE3080 Primer is intended for industrial applications, either new build or maintenance. It is suitable for application on properly sanded or sandblasted steel and for properly prepared galvanized or zinc coated substrates. This primer must be topcoated to achieve the best results.

HFE3080 Primer It is recommended for areas requiring high corrosion protection such as coastal service.

##### Industries:

- Oilfield & Energy Services
- Cranes and Construction Equipment
- Trailers & Rolling stock
- Waste and Recycling Industry

#### Product Characteristics

<b>Finish:</b> Lo Gloss	
<b>Volume Solids Mixed: (Unreduced)</b> <b>FEA0056: FEB0056 (5:1)</b>	53% ± 1%
<b>Pot Life:</b> (77°F (25°C) and 50% RH)	10 Hours
<b>VOC Mixed (Unreduced):</b> EPA Method 24 <b>FEA0056:FEB0056 (5:1)</b>	330 g/l 2.759 lbs./gal
<b>For unopened product (77°F (25°C))</b>	
<b>Component A</b>	3 years
<b>Component B</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 80 grit sandpaper.

Near White Blast SSPC–SP10 or White Blast SSPC–SP5 sandblasting is required for and any offshore or coastal environments.

For all other substrates, refer to the Endura recommended surface preparation instruction sheets or contact your Endura Representative.

#### Mix Ratio

5 parts by volume of component A [**FEA0056**]  
1 part by volume of component B [**FEB0056**]

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

#### Application Method

HFE3080 Primer can be applied using most spray-painting 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 (20-30 minutes).

**Agitation is not required while spraying; the zinc is fully suspended in the coating.**

Spray Gun Setup			
Feed Type	Fluid Tip	Application Pressures (heel of gun)	Fluid Delivery
<b>Siphon Feed</b>	1.6-1.8 mm	40-50 psi	
<b>Gravity Feed</b>	1.6-1.8 mm	30-40 psi	
<b>Pressure Feed</b>	1.4-1.8 mm	40-50 psi	10-14 oz/min
<b>Air Assist Airless</b>	13-17 Thou	1,000-1,800 psi	
<b>Airless</b>	13-17 Thou	1,700-3,000 psi	

Suggested Viscosity Ranges Ford 4 Viscosity Cup at 68°F (20°C)	
<b>Air Assist Airless</b>	29 - 32 secs
<b>Conventional</b>	28 - 31 secs
<b>Airless</b>	31 -60 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 Epoxy reducers up to 25% by volume.

- [FTH0654] Epoxy Reducer - Fast
- [FTH0653] Epoxy Reducer - Regular
- [FTH0652] Epoxy Reducer - Slow

##### Where VOC levels must be maintained:

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

- [FTH0016] Low VOC Epoxy Reducer – Regular
- [FTH0027] Low VOC Epoxy Reducer - Slow

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#### Film Build

HFE3080 Primer recommended film thickness:

<b>Wet: WFT Unreduced</b>	5.5 – 9.0 mils	140 – 230 microns
<b>Dry: DFT</b>	3.0 – 5.0 mils	76 – 127 microns

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

Theoretical coverage at 1.0 mil (25 microns)  
DFT: 850 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	1 Hours	30 Minutes
<b>Full Cure</b>	7-9 Days	5-6 Days	3-4 Days

**Dry Times subject to ambient conditions (temperature and humidity), good airflow and film build of the 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). Mechanical sanding with 180 – 220 grit sandpaper is recommended after exceeding the recoat window.

For questions about scheduling please contact your Endura Representative.

#### Topcoating Information

HFE3080 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)

Product lead times may apply.  
Please contact your Endura Representative for further information regarding stock availability and lead times.

HFE 3080 Primer		1 mixed gallon (3.78l)
Comp A - Grey	FEA0056-035	3.15 L
Comp B	FEB0056-022	0.63 L

HFE 3080 Primer		3.93 gallons (14.85l) approx.
Comp A - Grey	FEA0056-055	12.6 L
Comp B	FEB0056-036	2.25 L

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

<b>Solvent Resistance</b>	ASTM D4752	100 MEK Rubs; No Failure
<b>Impact resistance</b>	ASTM D2794	100 in. lbs Direct; 50 in. lbs Reverse NO failure
<b>Flexibility</b>	ASTM D522	1/4 in. mandrel bend: NO failure
<b>Service Temp</b>	-40°F to 250°F	-40°C to 121°C
<b>Percentage of zinc in the dry film</b>		88%

**Complies with the composition and performance requirements of SSPC SP 20 - Type 2; Level 1**

#### 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).