

Guardian Primer

Technical Data Sheet (TDS)

Product Description

Guardian Primer is a low VOC, high solids, two-component, medium-gloss epoxy primer. It provides excellent water, abrasion, and chemical resistance.

Product features:

- Surface tolerant characteristics
- Low temperature cure formulation
- Excellent water resistance
- Suitable for salt and freshwater immersion
- Excellent adhesion to tight rust
- Excellent abrasion and chemical resistance
- High solids (high film build)
- No induction time.
- VOC Compliant

Recommended Uses

Guardian Primer is intended for industrial applications, either new build or maintenance. It is suitable for application on steel, aluminum, other ferrous metals, and masonry surfaces. Guardian Primer can also be used in immersion service (non-potable water). This primer must be topcoated to achieve the best results.

Guardian Primer can also be used as an intermediate coat.

Industrial Applications:

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

Product Characteristics

Finish: Medium Gloss	
Volume Solids Mixed:(Unreduced) FEA0111: FEB0111 (4:1)	73% ± 1%
Pot Life: (77°F (25°C) and 50% RH)	4.5 Hours
For extended pot life contact your Endura Representative	
VOC Mixed (Unreduced): EPA Method 24 FEA0111: FEB0111 (4:1)	232 g/l 1.937 lb /gal
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 80 grit sandpaper.

For 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 [**FEA0111**]
1 part by volume of component B [**FEB0111**]

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

Application Method

Guardian 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 (20-30minutes).

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	10-14 oz/min
Air Assist Airless	11-13 Thou	1,000-1,800 psi	
Airless	11-13 Thou	1,700-3,000 psi	

Suggested Viscosity Ranges Ford 4 Viscosity Cup at 68°F (20°C)	
Air Assist Airless	30 - 33 secs
Conventional	29 - 32 secs
Airless	32 -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 Low VOC Epoxy reducers up to 20% 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

Guardian Primer recommended film thickness:

Wet: WFT Unreduced	5.5 – 11.0 mils	140 – 280 microns
Dry: DFT	4.0 – 8.0 mils	102 – 205 microns

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

Theoretical coverage at 1.0 mil (25 microns).
DFT: 1174 ft² per gallon at 100% transfer efficiency.

Dry Times

5 mils wet	68°F(20°C)	86°F(30°C)	104°F(40°C)
Topcoat	6-10 Hours	5 Hours	3 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 7 days at 68°F (20°C). Mechanical sanding with 180 – 220 grit sandpaper is recommended after exceeding the recoat window.

If the primer is allowed to sit for an extended period without being topcoated, the surface must be kept clean of contaminants to avoid any topcoat issues.

For questions about scheduling please contact your Endura Representative.

Topcoating Information

Guardian 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.

Guardian Primer	1 ¹ / ₄ mixed gallons (4.73l)	
Comp A - Beige	FEA0111-030	1 gallon (3.78l)
Comp B	FEB0111-020	1 quart (946ml)

Guardian Primer	5 mixed gallons (18.9l)	
Comp A - Beige	FEA0111-054	4 gallons (15.1l)
Comp B	FEB0111-030	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	5/16 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.