

HS-421 Primer

Technical Data Sheet (TDS)

Product Description

HS-421 Primer is a medium solid, medium build, two-component, urethane surfacer. It is designed to be applied to previously coated surfaces where high build and easy sanding is required.

Product features:

- Excellent sanding characteristics
- High build to 10.0 mils dry
- Easy sanding in as little as 2 hours
- Formulated to fill imperfections in rough surfaces

Recommended Uses

HS-421 Primer is intended as an automotive type of surfacer and is suitable for application on previously coated surfaces including fiberglass and wood.

Application of HS-421 is not recommended over bare metal if corrosion or impact resistance are expected.

Flexible surfaces should not be coated with this primer.

HS-421 primer must be sealed with Epoxy Primer Sealer or EP-2C CF after sanding and before application of the topcoat.

Product Characteristics

Finish: Lo Gloss	
Volume Solids Mixed:(Unreduced) FEA0313: FUB0100 (4:1)	45% ± 1%
Pot Life:(77°F (25°C) and 50% RH)	3 Hours
VOC Mixed (Unreduced): EPA Method 24 FEA0313: FUB0100 (4:1)	472 g/l 3.938 lb /gal
VOC content will vary with each B component	
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 to a minimum of SSPC-SP6 or mechanically sanded with 80 grit sandpaper.

A first coat of Epoxy Primer Sealer or EP-2C CF is recommended on bare metal to provide the best corrosion resistance.

Polyester body filler and or putty must be finish sanded with 180 grit sandpaper prior to application of HS-421 Primer.

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 [**FEA0313**]
1 part by volume of component B [**FUB0100**]
OR

1 part by volume of component B [**FUB0112**]

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

Application Method

HS-421 Primer can be applied using most spray systems, although electrostatic sprayers are not recommended. Apply 1-3 coats as required to achieve the desired film thickness. Allow sufficient flash time between coats especially with higher film builds applied (10-20 minutes).

Spray Gun Setup			
Feed Type	Fluid Tip	Application Pressures (heel of gun)	Fluid Delivery
Siphon Feed	1.6-2.0 mm	40-50 psi	
Gravity Feed	1.6-2.0 mm	30-40 psi	
Pressure Feed	1.4-2.0 mm	50-60 psi	10-14 oz/min
Air Assist Airless	9-17 Thou	1,000-1,800 psi	
Airless	11-15 Thou	1,700-3,000 psi	

Suggested Viscosity Ranges Ford 4 Viscosity Cup at 68°F (20°C)	
Air Assist Airless	40 - 44 secs
Conventional	39 - 41 secs
Airless	42 -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 20% by volume.

FTH0086 – EX-2C Thinner.
FTH0014 – Medium Topcoat Reducer
FTH0090 – EX-2C Slo Thinner

Film Build

HS-421 Primer recommended film thickness:

Wet: WFT Unreduced	6.0 – 11.0 mils	152 – 280 microns
Dry: DFT	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: 733 ft² per gallon at 100% transfer efficiency.

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Dry Times

	68°F(20°C)	86°F(30°C)	104°F(40°C)
To Sand	4 hours	3 hours	2 hours
To Seal	1 hours	45 minutes	30 minutes
Full Cure	7-9 days	5-6 days	3-4 days

The above dry times are based on the using Supercatalyst II at a rate of 1 fluid oz (30ml) per mixed quart of HS-421. Use of Supercatalyst II is recommended to reduce dry times.

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). Mechanical sanding with 180–220 grit is recommended after the recoat window has been exceeded and before sealing with Epoxy Primer Sealer or EP-2C CF.

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 improved scheduling please contact your Endura Representative.

Topcoating Information

HS-421 primer must be sealed with Epoxy Primer Sealer or EP-2C CF after sanding and before application of the topcoat.

HS-421 Primer can be topcoated with the entire range of Endura topcoat products after being sealed

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)

HS-421 Primer	1 1/4 mixed gallons (4.73 l)	
Comp A - Grey	FEA0313-030	1 gallon (3.78l)
Comp B	FUB0100-020 OR FUB0112-020	1 quart (946ml)

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	100 in. lbs; NO failure
Flexibility	ASTM D522	1/4 mandrel bend: NO failure
Service Temp	-40°F to 360°F	-40°C to 182°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.