



Excel d2m & d2m HS

Technical Data Sheet (TDS)

Product Description

Endura Excel d2m and (HS) is a two component polyurethane coating that can be used as in direct to metal applications or as a topcoat over primer. It will provide excellent adhesion over a wide range of surfaces.

Product features:

- Direct to metal application
- Fast cure
- High build
- Excellent color retention
- **VOC Compliant**

Recommended Uses

Endura Excel d2m is a high performance coating for protecting all surfaces.

Mix Ratio

2 parts by volume of component A [*varies by color*]

1 part by volume of component B [FUB0401]
 or

1 part by volume of component B [FUB0401HS]

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

Product Characteristics

Finish: gloss/semi gloss (other gloss levels available)

Volume Solids: 57.5% ± 1.5% (Depending on color)

Pot Life*: 1-2 Hours @ 77°F (25°C) and 50% RH

VOC (EPA Method 24): All colors < 420 gram/liter (3.5 lbs/gallon)

Shelf Life:** 2 years for both Component A & B

*Less when Endura Super Catalyst II is used.

**For unopened product.

Surface Prep

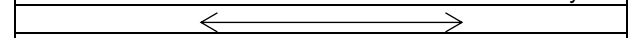
Surfaces must be free of all contaminants such as dust, oil, grease and salt. It is recommended that all steel and other ferrous surfaces be sandblasted or mechanically sanded with 80 grit sandpaper.

May also be applied in most surfaces that have been: degreased, sanded with 280 – 320 grit sandpaper and prepared with appropriate Endura products.

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	1.3-1.4 mm	30-40 psi	
Pressure Feed	1.0-1.8 mm	55-65 psi	10-14 oz/min
Air Assist	11-13 Thou	1,000-1,800 psi	
Airless	11-13 Thou	1,700-2,000 psi	

Spray Viscosity*

Using a Ford 4 Cup (White)	
14 Seconds*	Reduce as necessary*
	
Conventional	Airless

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

*If required, recommended spraying viscosity is achieved by reducing with Endura Low VOC topcoat reducers:
 10% with FTH0021 – Low VOC Topcoat Reducer-Regular
 10% with FTH0023 – Slow Low VOC Topcoat Reducer-Slow

Application Method

Apply one to two single wet coats with 10–30 minutes between coats.



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Film Build

Endura Excel d2m has a recommended film build thickness of:

As a direct to metal

Wet (unreduced): 7.0 – 10.5 mils wet (175 – 262.5 microns)

Dry: 4.0 – 6.0 mils dry (100 – 150 microns)

As a top coat over primer

Wet (unreduced): 3.5 – 7.0 mils wet (87.5 – 175 microns)

Dry: 2.0 – 4.0 mils dry (50 – 100 microns)

Theoretical coverage at 1.0 mils (25 microns) DFT
 970 ft² per gallon at 100% transfer efficiency

Endura Excel d2m HS has a recommended film build thickness of:

As a direct to metal

Wet (unreduced): 16.0 – 33.0 mils wet

Dry: 10.0 – 20.0 mils dry

As a top coat over primer

Wet (unreduced): 8.0 – 16.0 mils wet

Dry: 5.0 – 10.0 mils dry

Theoretical coverage at 1.0 mils (25 microns) DFT
 970 ft² per gallon at 100% transfer efficiency.

Dry Times

*After curing at room temperature for 24 hours, to achieve the inter-coat adhesion, sand with 400-600 grit sand paper.

Endura Excel d2m

	@ 20°C (68°F)	@ 30°C (86°F)	@ 40°C (104°F)
Dust Free	2 Hours	1 Hour	30 Minutes
Full Cure	7 Days	5 Days	3 Days

Endura Excel d2m HS

	@ 20°C (68°F)	@ 30°C (86°F)	@ 40°C (104°F)
Dust Free	4-5 Hours	3 Hours	2 Hours
Full Cure	7 Days	5 Days	3 Days

*Subject to ambient conditions (temperature and humidity) and good airflow.

For questions about scheduling please contact your Endura representative.

Clean Up

Clean up spills, and equipment 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 Gallon and Pail kits.
 Other custom sizes may be available.

Gallon Kit	Comp A	CLRD*****-030 (2x1 Gallon) [part #'s will vary depending on color]
	Comp B	FUB0401-030 (1 Gallon) or FUB0401HS-030 (1 Gallon)
Pail Kit	Comp A	CLRD*****-050 (2x1 Pail) [part #'s will vary depending on color]
	Comp B	FUB0401-050 (1 Pail) or FUB0401HS-050 (1 Pail)

Safety Precautions

Please refer to all Safety Data Sheets (SDS) before using this product. SDS sheets can be found on our website at www.polyglasscoatings.com

Environmental Conditions

For optimum coating performance product, substrate and ambient temperature should be between 20°C-25°C* (68°F-77°F). To prevent condensation during application the surface temperature must be 3°C (5°F) or more above the dew point at all times.

*For use outside this range please contact your Endura Representative.

Environmental Conditions

Hardness	ASTM D3363	H – 2H
Solvent Resistance	ASTM D4752	50 MEK Rubs; No Failure
Abrasion Resistance (1000 cycles CS-17)	ASTM D4060	30-40 mg loss
Adhesion Cross Cut	ASTM D3002	5 (100/100)
Impact resistance	ASTM D2794	40 in. lbs; NO failure
Service Temp	-40°C to +182°C -40°F to 360°F	