

North America Technical Data Sheet

# **E250 DTM Epoxy Primer**™

Primer 11/28/2016

FOR PROFESSIONAL USE ONLY

### **Description**

A two-component high solid, low VOC direct to metal (DTM) epoxy primer for the commercial vehicle builder and refinish market. The product is easy to apply with excellent hold out and smooth appearance. The E250 DTM Epoxy Primer is a versatile product and good over multiple substrate types making it ideal for commercial vehicle repair shops. The ready to spray VOC is 2.1 lbs/gal or 3.5 lbs/gal depending on the reducer selection.

	Safety Considerations Use suitable personal protection. AkzoNobel recommends the use of a fresh air supply respirator. Refer to the product Safety Data Sheet (SDS) for more complete safety information.				
	High Build Primer Surfacer / Seale				
	3 E250 DTM Epo 1 E250 DTM Epo				
🗀 : 🗀	I E230 DTWIED	oxy nardener			
	Medium Build Wet on Wet Sealer (Smooth substrate, cup gun application)				
IIП⊓ I	3 E250 DTM Epo			,	
	1 E250 DTM Epo				
			50 Epoxy 3.5 Reduc		
	Medium Build Wet on Wet Sealer		e, pressure application	on)	
	3 E250 DTM Epo				
	1 E250 DTM Epo		-0.5		
	0.5 R250 Exempt : Use AkzoNobel Measuring Stick	2.1 Reducer / R25	50 Epoxy 3.5 Reduc	er	
	106				
	Spray gun setup:	<u> </u>			acture specification
	HVLP – Pressure (3:1)	1.3 – 1.5mm	Max 10psi (d		12 – 16 oz/min
	HVLP – Pressure Feed (3:1:0.5)	1.0 – 1.3mm	Max 10psi (d		12 – 16 oz/min
	HVLP – Gravity Feed (3:1)	1.7 – 1.9mm	Max 10psi (d		
	HVLP – Gravity Feed (3:1:1)	1.3 – 1.5mm	mm Max 10psi (cap)		
	Apply one (1) to two (2) single flowing coats				
	Between coats		Before Topcoat		
1111			30 – 45 minutes at 70°F (21°C)		
	Recoat within 72 hours at 70°F (21	I°C)			
					400E (000O)
	Dry to cond		70°F (21°C) 24 hrs		40°F (60°C) 1 – 1½ hrs
	Dry to sand		24 1115		1 - 1/2 IIIS

Read complete TDS for detailed product information.



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Suitable Surfaces				
Existing finishes	#P320 to #P400 grit dry			
Fiberglass gelcoat (unbroken)	#P220 to #P320 grit dry			
Polyester bodyfiller	#P180 to #P220 grit dry			
Aluminum 5052	#P150 to #P180 grit dry			
Cold Rolled Steel	#P80 to #P180 grit dry			
Blasted Steel	Blow off dust			
Galvanized steel	Red scuff pad followed by Autoprep Pretreatment Wipes or			
Bonderite 1455.				

E250 DTM Epoxy Primer can be applied over Aluminum 5052 and cold rolled steel directly with proper substrate preparation shown above. For optimal protection and performance use Autoprep Pretreatment Wipes or Bonderite 1455. Other aluminum and steel grades should be tested prior to use.

E250 DTM Epoxy Primer can be applied over scuffed and AutoPrep Wipes or Bonderite 1455 pretreated galvanized steel only.

E250 DTM Epoxy Primer can be applied over most polyester bodyfillers but should be tested prior to use. Consult AkzoNobel for approved bodyfiller. Properly degrease substrate prior to sanding with AutoPrep UltraPrep surface cleaner and R859 wax and grease remover.

Product ar	Product and Additives				
Product	E250 DTM Epoxy Primer	Item #531287 – Black Item #531291 – White Item #531292 - Grey			
Hardener	E250 DTM Epoxy Hardener	Item #531295			
Reducers		Item #531298			
	R250 Epoxy 3.5 Reducer	Item #531297			

The item numbers given above are for the 1 gallon fill size. A variety of fill sizes are available for each component. Please reference the price list for additional information.

Basic Raw Material			
E250 DTM Epoxy Primer	Epoxy resins		
E250 DTM Epoxy Hardener	Polyamide resins		
R250 Exempt 2.1 Reducer	Solvents		
R250 Epoxy 3.5 Reducer	Solvents		

Product Characteristics					
WPG (a-component)	13.1 - 13.7 lbs/gal	Gloss	Low		
Volume Solids (3:1)	50% +/- 1%	Color	Black, White, Grey		
Volume Solids (3:1:1)	39% +/- 1%	Pot Life	4 hrs @ 70°F (21°C)		
Volume Solids (3:1:0.5)	44% +/- 1%				



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## **Mixing Ratio**



	-			
3		E250 DTM Epoxy Primer		
	1	E250 DTM Epoxy Hardener		

High Build Primer Surfacer / Sealer (Blasted Steel)



Medium Build Wet or	n Wet Sealer (Smooth substrate, cup gun application)
3	E250 DTM Epoxy Primer
1	E250 DTM Epoxy Hardener



l	Medium Build Wet or	n Wet Sealer (Smooth substrate, pressure application)
	3	E250 DTM Epoxy Primer
	1	E250 DTM Epoxy Hardener

R250 Exempt 2.1 Reducer / R250 Epoxy 3.5 Reducer

R250 Exempt 2.1 Reducer / R250 Epoxy 3.5 Reducer

For accurate mixing, use measuring stick #106. Mix thoroughly.

Note: For best results use 3:1 mix ratio for blasted steel regardless of application method. Use 3:1:1 for smooth substrates and cup gun application and 3:1:0.5 for smooth substrates and pressure application.

#### **Viscosity**



E250 DTM Epoxy Primer (3:1)	11.5 – 13.5 sec	EZ ZAHN #3 at 70°F (21°C)
E250 DTM Epoxy Primer (3:1:1)	7.5 – 9.5 sec	EZ ZAHN #3 at 70°F (21°C)
E250 DTM Epoxy Primer (3:1:0.5)	9 - 11 sec	EZ ZAHN #3 at 70°F (21°C)

Viscosities are reported as Ready to Spray

# Spray gun set-up / application pressure

0.5



Spray gun setup:	Check gun	Application Pressure
HVLP – Pressure (3:1)	1.3 – 1.5mm	Max 10 psi (cap), 12-16 oz/min
HVLP – Pressure Feed (3:1:0.5)	1.0 – 1.3mm	Max 10 psi (cap), 12-16 oz/min
HVLP – Gravity Feed (3:1)	1.7 – 1.9mm	Max 10 psi (cap)
HVLP – Gravity Feed (3:1:1)	1.3 – 1.5mm	Max 10 psi (cap)

Check gun manufacturer specification

#### Application



Wet on Wet Primer Sealer - Apply one (1) to two (2) medium flowing coats.

Primer Surfacer (Sanded) – Apply two (2) single flowing coats

#### Flash off



10 minutes at 70°F (21°C) between coats

30 - 45 minutes at 70°F (21°C) final flash before top coating



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## Dry times



Object Temp	Before Topcoat @ (1.2 – 1.5mils)	Dry to Sand
70°F (21°C)	30 – 45 min	24 hours
140°F (60°C)		1 –1 ½ hours

### **Dry Film Thickness**

Primer Sealer – 1.2 – 1.5 mils (30-38 microns) per coat		
Primer Surfacer (Sanded) – 1.5 – 1.75 mils (38-45 microns) per coat		
Sandblasted surfaces – Minimum 1.5 mils over blast profile		

### Coverage

Coverage is calculated for the ready to spray product at 1 mil and 100% transfer efficiency

Primer Sealer (3:1:1) 624 sq ft / liter Primer Sealer (3:1:0.5) 694 sq ft / liter Primer Surfacer (3:1) 780 sq ft / liter

#### Sanding



Primer Surfacer (Sanded) applications

Final dry sanding step use #P400 – 500 before application of topcoats

Initial sanding steps may be executed with a coarser sanding grit: #P320

#### Recoatability

U280 Single Stage	460 Tintable Sealer over sanded E250 Surfacer
U350 Single Stage	2K 20 Primer Surfacer over sanded E250 Surfacer
U500 Single Stage	Polyester Body fillers
U-Base Basecoat	

E250 DTM Epoxy Primer must be top coated within 72 hours of parts being stored indoors at 70°F (21°C). After 72 hours, E250 DTM Epoxy Primer must be sanded prior to topcoating or applying polyester body filler.

E250 DTM Epoxy Primer can be recoated with polyester body filler products after a minimum of 1 hour and a maximum of 72 hours without sanding. After the polyester body filler and the E250 DTM Epoxy Primer have dried, sand the polyester body filler material until satisfied with the repair. For further priming, any U-TECH primer may be applied that is recommended for the substrates exposed. U-TECH 460 Tintable Sealer and 2K20 Primer Surfacer may be applied over sanded E250 DTM Epoxy Primer.

#### Cleaning of equipment

Clean equipment with extra strong cleaning solvents



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VOC		
E250 DTM Epoxy Primer (3:1)	2.1 lbs/gal	250 g/l
E250 DTM Epoxy Primer (3:1:1) – Exempt 2.1 Reducer	2.1 lbs/gal	250 g/l
E250 DTM Epoxy Primer (3:1:0.5) – Epoxy 3.5 Reducer	< 2.8 lbs/gal	< 336g/l
E250 DTM Epoxy Primer (3:1:0.5) – Exempt 2.1 Reducer	2.1 lbs/gal	250 g/l
E250 DTM Epoxy Primer (3:1:1) – Epoxy 3.5 Reducer	< 3.5 lbs/gal	< 420 g/l

VOC is reported at ready to spray

### **Product Storage and Shelf Life**

Store products unopened and used products with closed lids. Store products between 70°F-95°F (21°C-35°C). Optimal storage temperature is 77°F (25°C). Avoid extreme temperature fluctuation when storing.

E250 DTM Epoxy Primer White, Black and Grey	2 years
E250 DTM Epoxy Hardener	1 year
R250 Exempt 2.1 Reducer	2 years
R250 Epoxy 3.5 Reducer	2 years

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IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products subject to advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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