

High Solids Urethane Primer-Sealer E2N816, E2W817, E2B818, E2A819

E2N816/E2W817/E2B818/E2A819 High Solids Urethane Primers are air dry or low bake, direct-to-metal, high performance urethane primers designed for Fleet, Truck and Original Equipment Manufacturers that require a VOC compliant system. E2N816/E2W817/E2B818/E2A819 High Solids Urethane Primers have a VOC of 2.1 pounds per gallon and have a range of hardeners to customize cure speed and application. Available in Tan, White, Black, and Gray.



### SUITABLE SUBSTRATES

- Cold rolled steel
- Hot rolled steel
- Galvanized steel
- Galvaneal
- SMC
- Aluminum
- Fiberglass

NOTE: Not for use on immersed surfaces. Not for use on surfaces with extended surface temperatures of 250°F or more.



#### MIXING



4 parts 1 part E2N816, VS100 or R7K7210 E2W817, or ES20 E2B818,

or E2A819

V6V815 Hardener

1 part

Reducer

**Cup Gun Mix** 



1 part

or ES20

Reducer

4 parts E2N816 E2W817. E2B818, or E2A819

1 part VS100 or V6V810 R7K7210 Hardener

Pot Life: 60-75 minutes

**Pressure Pot Mix** 



3 parts E2N816, E2W817, E2B818, or E2A819

1 part VS100 or R7K7210 or ES20 Reducer

V6V838 Hardener

Pot Life: 1-2 hours



### **APPLICATION**

Pot Life: 30-45 minutes

Apply 1 wet coat or 2 medium coats of High Solids Urethane Primer-Sealer to achieve a dry film thickness of 2.0-2.5 mils mils.

- HVLP: Adjust air pressure at cap to 8-10 psi.
- 2. For pressure feed applications, adjust air pressure at the gun to 50-55 psi with a fluid delivery of 8-12 ounces per minute.
- Conventional: For pressure feed applications, adjust air pressure at the gun to 50-55 psi with a fluid delivery of 8-12 ounces per minute.

### DRYING SCHEDULE

Standard Air dry: at 75°F and 2.0 mils, dry times will be extended by thicker films. Higher temperatures and/or humidity will decrease dry times.

#### Drying Schedule was tested by using V6V815 w/ 1 oz. GA1097 per sprayable gallon

Hand Slick <5 minutes Topcoat 15 minutes **Dust Free** 30 minutes Tack Free 45 minutes Dry to Sand 1 hour



#### PERSONAL PROTECTION

- Read all label directions before use.
- Refer to SDS for specific information.
- Wear positive-air respirator when mixing and applying.
- Wear a NIOSH approved dust particulate mask when sanding.
- Wear safety goggles, coveralls, and latex gloves when using product.



High Solids Urethane Primer-Sealer E2N816, E2W817, E2B818, E2A819

### PRODUCT DATA SHEET



### SURFACE PREPARATION

- Solvent clean with the appropriate Sherwin-Williams® solvent cleaner, and wipe dry with a clean cloth.
- Abrade all bare metal surfaces with 220 or 320 grit sandpaper, or a red Scotch® Brite pad.
- Apply body filler to clean bare metal as needed.
- Solvent clean again with appropriate Sherwin-Williams® solvent cleaner to remove sand residue.



### SUITABLE SUBSTRATES

- Cold rolled steel
- Hot rolled steel
- Gavanized steel
- Galvaneal

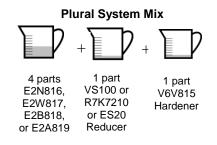
- SMC
- Aluminum
- Fiberglass

**NOTE:** Not for use on immersed surfaces. Not for use on surfaces with extended surface temperatures of 250°F or more.

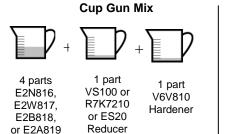


### **MIXING**

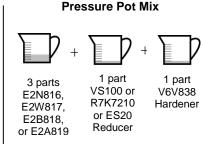
- · Stir or shake HS Urethane Primer thoroughly before mixing.
- For Plural System Mix, mix 4 parts HS Urethane Primer with 1 part VS100 or R7K7210 Reducer and 1 part V6V815 Hardener.
- For Cup Gun Mix, mix 4 parts HS Urethane Primer with 1 part VS100 or R7K7210 Reducer and 1 part V6V810 Hardener.
- For Pressure Pot Mix, mix 3 parts HS Urethane Primer with 1 part VS100 or R7K7210 Reducer and 1 part V6V838 Hardener.
- Stir thoroughly and strain before mixing.



Pot Life: 30-45 minutes



Pot Life: 60-75 minutes



Pot Life: 1-2 hours

REDUCER	TEMPERATURE RANGE
VS100	50-75°F
R7K7210 or ES20	75-90°F

#### NOTES:

- For increased temperatures, R7K7210 or ES20 can be used for improved overspray acceptance and melt-in.
- Up to 2 oz. of GA1097 Accelerator may be added to 1 gallon of Ready To Spray blend of the above to reduce dry times. Each ounce of GA1097 increases the VOC of the product 0.06 lbs/gal.

**TINTING:** E2N816/E2W817/E2B818/E2A819 can be blended together by volume, or can be tinted by using up 10% by volume of Genesis Monochromatic solid color toners.

Do not use GENESIS® metallic toners to tint product.



High Solids Urethane Primer-Sealer E2N816, E2W817, E2B818, E2A819

## PRODUCT DATA SHEET



### **APPLICATION**

- 1. HVLP: Adjust air pressure at cap to 8-10 psi.
- For pressure feed applications, adjust air pressure at the gun to 50-55 psi with a fluid delivery of 8-12 ounces per minute.
- Conventional: For pressure feed applications, adjust air pressure at the gun to 50-55 psi with a fluid delivery of 8-12 ounces per minute.
- 4. Apply 1 wet coat or 2 medium coats of High Solids Urethane Primer-Sealer to achieve a dry film thickness of 2.0 mils-2.5 mils.

#### **EQUIPMENT**

Gun Type	<u>Nozzle</u>	Air Pressure
Conventional Gravity Feed	1.3-1.5 mm	50-55 psi
Conventional Pressure Feed	0.8-1.1 mm at 8-12 oz/min	50-55 psi
HVLP Gravity Feed	1.3-1.5 mm	8-10 psi at cap
HVLP Pressure Feed	0.8-1.1 mm at 8-12 oz/min	8-10 psi at cap

### **RECOAT**

Standard using V6V815 or V6V810 Hardener with or without GA1097 Accelerator

	Min topcoat time w/Accelerator	Min topcoat time w/o Accelerator	Max topcoat time w/ Accelerator	Max topcoat time w/o Accelerator
GENESIS® 3.5/2.8 SS	15-30 minutes	45 minutes	7 days	7 days
GENESIS® Basecoat	15-30 minutes	45 minutes	4 days	7 days
GENESIS® M	15-30 minutes	45 minutes	7 days	7 days
Dimension® 3.5 SS	15-30 minutes	45 minutes	7 days	7 days
Ultra 7000® Basecoat	15-30 minutes	45 minutes	4 days	7 days

#### When beyond the maximum topcoat time, sanding is mandatory.

NOTE: Minimum recoat times will be extended if substrate and/or ambient temperatures are below 70° F.



### DRYING SCHEDULE

**Standard Air dry:** at 75°F and 2.0 mils, dry times will be extended by thicker films. Higher temperatures and/or humidity will decrease dry times.

Drying Schedule was tested by the following mixes:

	Using V6V815 w/ 1 oz GA1097 per Sprayable Gallon	Using V6V810 w/ 1 oz GA1097 per Sprayable Gallon	Using V6V837 w/ 1oz GA1097 per Sprayable Gallon
Hand Slick	<5 minutes	10 minutes	15 minutes
Topcoat	15 minutes	20 minutes	30 minutes
Dust Free	30 minutes	1 hour	1 hour
Tack Free	45 minutes	1 hour	1 hour
Dry to Sand	1 hour	3 hours	3 hours

**Bake:** 30 minutes at 180°F without accelerator

Dry to sand – after 15 minutes cool down

Dry to recoat – after 15 minutes cool down and a thorough sanding using 320 or 400 grit paper

**NOTE**: Dry times can be extended by excess film build, low temp, high humidity, high emersion and high surface temperatures.

### **TOPCOAT**

- Dimension® Topcoats
- ULTRA 7000® Basecoat
- GENESIS® M Single Stage
- GENESIS® G4 Basecoat/Clearcoat
- GENESIS® GC Single Stage
- GENESIS® LV Single Stage



High Solids Urethane Primer-Sealer E2N816, E2W817, E2B818, E2A819

# PRODUCT DATA SHEET



### **TECHNICAL DATA**

Mixing Ratio by Volume	With V6V815: 4:1:1 With V6V810: 4:1:1 With V6V837: 3:1:1	Physical Properties	
Max VOC @ 4:1:1	2.03 lbs/gal	Salt Spray 500 hours	Pass
Ready to Spray Volume Solids	59 %	Impact Resistance (direct at 80 in-lbs.)	Pass
Coverage @ 1 mil dry	942-952 FT <sup>2</sup> /gal	Humidity 100 hours	Pass
Viscosity (sprayable) Gardener #2 Zahn Cup (ISO calibrated)	At 4:1:1: 13-17 sec At 3:1:1: 15-18 sec	Flexiblity (1/8" conical mandrel)	Pass
Recommended Dry Film Thickness	2.0-2.5 mils	Gloss Holdout (at 15 minute recoat)	Excellent

E2N816, E2W817,	As Packaged		As Applied	
E2B818, E2A819	Lb/Gal	G/L	Lb/Gal	G/L
Plural System Mix				
Density	15.17	1818	12.84	1539
	% by Wt.	% by Vol.	% by Wt.	% by Vol.
Volatiles	12.6	27.1	22.9	41.0
Solids	87.4	72.9	77.1	59
Water	0	0	0	0
Exempt Compounds	0	0	9.7	16.6
	Lb/Gal	G/L	Lb/Gal	G/L
VOC Total	1.90	228	1.69	203
VOC Less Exempt	1.90	228	2.03	243
	Lb/Gal	KG/L	Lb/Gal	KG/L
HAPs	0.00	0.000	0.00	0.000

E2N816, E2W817,	As Packaged		As Applied	
E2B818, E2A819	Lb/Gal	G/L	Lb/Gal	G/L
Cup Gun Mix				
Density	15.17	1818	12.88	1543
	% by Wt.	% by Vol.	% by Wt.	% by Vol.
Volatiles	12.6	27.1	22.6	40.1
Solids	87.4	72.9	77.4	59.9
Water	0	0	0	0
Exempt Compounds	0	0	9.7	16.6
	Lb/Gal	G/L	Lb/Gal	G/L
VOC Total	1.90	228	1.66	199
VOC Less Exempt	1.90	228	1.99	239
	Lb/Gal	KG/L	Lb/Gal	KG/L
HAPs	0.00	0.000	0.00	0.000



High Solids Urethane Primer-Sealer E2N816, E2W817, E2B818, E2A819

## PRODUCT DATA SHEET

E2N816, E2W817,	As Packaged		As Applied	
E2B818, E2A819	Lb/Gal	G/L	Lb/Gal	G/L
Pressure Pot Mix				
Density	15.17	1818	12.52	1500
	% by Wt.	% by Vol.	% by Wt.	% by Vol.
Volatiles	12.6	27.1	27.8	45.2
Solids	87.4	72.9	72.2	54.8
Water	0	0	0	0
Exempt Compounds	0	0	16.2	24.8
	Lb/Gal	G/L	Lb/Gal	G/L
VOC Total	1.90	228	1.44	173
VOC Less Exempt	1.90	228	1.92	230
-	Lb/Gal	KG/L	Lb/Gal	KG/L
HAPs	0.00	0.000	0.00	0.000

To learn more about Sherwin-Williams® products, visit our website at oem.sherwin-williams.com/transportation ©2017 The Sherwin-Williams Company

AS2473 3/1/2017