



# SHERWIN-WILLIAMS

## PRICE QUOTATION

Date: 08/13/01

Customer Name: MARTIN ENGINEERING  
Address: 404 N 1ST ST

Telephone: (309)594-2384  
Account #: 6582-3541-1

City: NEPONSET

State: IL Zip: 61345

Authorized Representative: SID DOUGLAS

Project Name No: \_\_\_\_\_

Project Start Date: \_\_\_/\_\_\_/\_\_\_

Project Completion Date: \_\_\_/\_\_\_/\_\_\_

Check one: Single Purchase ? :

Annual Requirements ? :

WE ARE PLEASED TO QUOTE YOU AS FOLLOWS:

SALES No.	SIZE	PROD No.	DESCRIPTION	QTY	PRICE	EX PRICE
630-3234	4GL-KT	B69V3	ZINC CLAD II BINDER PRICE FOR 4 GAL OF BINDER	1	81.44	81.44
630-4232	KEG	B69D11	ZINC CLAD II DUST 72# TUB ZINC DUST	1	145.63	145.63
617-5343	GALLON	B67W301	B67 INTERMEDIATE HEAVY DUTY EPOXY PART A	1	33.07	33.07
617-5301	GALLON	B60V3	HD EPX HARD D INTERMEDIATE HARDENER	1	33.07	33.07
6401-18188	GALLON	B65W401	GLOSS B65 TOPCOAT COROTHANE II GLOSS TOPCOAT	1	50.54	50.54
9341-99993	GALLON	B65W201	SATOM B65 TOPCOAT COROTHANE II SATIN TOPCOAT	1	42.79	42.79
					TOTAL	386.54

We thank you for your consideration of SHERWIN-WILLIAMS products and look forward to supplying these products to you.

SHERWIN-WILLIAMS

TERMS OF THE SALE

By: \_\_\_\_\_

Terms: NET 20 PROX  
Quantity of Shipment: ANY QUANTITY  
F.O.B. Location: NEPONSET  
Quotation Expires: 12-31-01

623 S MAIN ST  
PRINCETON IL 61356  
Store 3063 Phone (815)879-8731  
Territory #: \_\_\_\_\_

NOTICE: Please take notice that the quotation set forth above is not a contract and is subject to and conditioned upon approval by the Store Manager where the merchandise is ordered. In the event such approval is not obtained, you will be provided with a revised quotation and the quotation set forth above shall be null, void and of no force or effect. This quotation will be considered approved when SHERWIN-WILLIAMS delivers a notice or otherwise indicates its approval to you.



# SHERWIN WILLIAMS

## Industrial and Marine Coatings

# ZINC CLAD™ II ETHYL SILICATE INORGANIC ZINC-RICH COATING

PART E B69V3  
PART F B69D11

BINDER  
Zinc Dust

6.02

### PRODUCT INFORMATION

Revised 1/97

#### Product Description

**ZINC CLAD II ETHYL SILICATE** is a solvent-based two-pack-age, inorganic ethyl silicate, zinc-rich coating.

- Meets Class B requirements for Slip Coefficient and Creep Resistance, .56
- 85% zinc content in dry film
- Coating self-heals to resume protection if damaged
- Provides cathodic/sacrificial protection by the same mechanism as galvanizing. Also protects steel by forming an inorganic moisture and solvent barrier

- For use over properly prepared blasted steel.
- As a one-coat maintenance coating or as a permanent primer for severely corrosive environments (pH range 5-9)
- Economical replacement for galvanizing with similar performance
- Ideal for application at low temperatures or service at high temperatures and/or humidity conditions
- Water intake and discharge lines (non-potable)
- Where abrasion resistance and hardness is required
- Bridges, refineries, drilling rigs
- Shop or field application
- Not recommended for severe acid or alkali exposure

<b>Finish:</b>	Flat
<b>Color:</b>	Gray-green
<b>Volume Solids:</b>	62% ± 2%, ASTM D2697, mixed
<b>Weight Solids:</b>	82% ± 2 %, mixed)
<b>VOC (calculated):</b>	Unreduced: 462 g/L; 3.9 lb/gal mixed Reduced 10%: 496 g/L; 4.15 lb/gal
<b>Zinc Content in Dry Film:</b>	85% by weight
<b>Mix Ratio:</b>	2 components; premeasured 5 gallons mix
<b>Recommended Spreading Rate per coat:</b>	
Wet mils:	5.0 - 8.0
Dry mils:	3.0 - 5.0
Coverage:	200 - 332 sq ft/gal approximate
<b>Note:</b>	Brush application is for stripe coating and small areas only.
<b>Drying Schedule @ 5.0 mils wet @ 50% RH:</b>	
	@ 77°F
Rain resistant	20-30 minutes
To touch:	15 minutes
To handle:	1-2 hours
To recoat:	18 hours
To cure:	7 days
Immersion service:	14 days
	Drying time is temperature, humidity, and film thickness dependent.
<b>Pot Life:</b>	8 hours @ 77°F
<b>Sweat-In-Time:</b>	none required
<b>Shelf Life:</b>	12 months, unopened, at 77°F
<b>Flash Point:</b>	55°F, PMCC, mixed
<b>Reducer/Clean Up:</b>	Below 80°F - Xylene, R2K4 Above 80°F - Reducer #58, R7K58

<b>System Tested:</b> (unless otherwise indicated)	
Substrate:	Steel
Surface Preparation:	SSPC-SP10
Finish:	1 ct. Zinc Clad II @ 3.0 mils dr
<b>Abrasion Resistance:</b>	
Method:	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load
Result:	326 mg loss
<b>Adhesion:</b>	
Method:	ASTM D4541
Result:	200 psi
<b>Direct Impact Resistance:</b>	
Method:	ASTM G14
Result:	60 in. lbs.
<b>Dry Heat Resistance:</b>	
Method:	ASTM D2485
Result:	750°F
<b>Immersion Resistance (untopcoated):</b>	
Method:	@ 77°F
Results:	Acceptable for: crude oil, fresh and demineralized water, gasoline
<b>Moisture Condensation Resistance:</b>	
Method:	ASTM D4585, 100°F, 2000 hours
Result:	No Failure
<b>Pencil Hardness:</b>	
Method:	ASTM D3363
Result:	3H
<b>Salt Fog Resistance:</b>	
Method:	ASTM B117, 2000 hours
Result:	No Failure
<b>Wet Heat Resistance:</b>	
Method:	Non-immersion
Result:	115°F
<b>Slip Coefficient:</b>	
Method:	ASTM A325 and ASTM A490
Result:	Class B, 0.56
	Provides performance comparable to products formulated to Federal Specifications: Mil-P-38336, Mil-P-46105, and SSPC Paint 20

**SHERWIN  
Williams****ZINC CLAD™ II ETHYL SILICATE**

6.02

*Industrial and Marine  
Coatings***INORGANIC ZINC-RICH COATING**PART E B69V3  
PART F B69D11BINDER  
ZINC DUST**PRODUCT INFORMATION****Zinc Primer/Finish, immersion or atmospheric:**

1 ct. Zinc Clad II Ethyl Silicate @ 3.0 - 5.0 mils dft

**Acrylic Topcoat, atmospheric:**

1 ct. Zinc Clad II Ethyl Silicate @ 3.0 - 5.0 mils dft

2 cts. DTM Acrylic Coating @ 2.5 - 4.0 mils dft/ct

**Coal Tar Epoxy Topcoat, atmospheric:**

1 ct. Zinc Clad II Ethyl Silicate @ 3.0 - 5.0 mils dft

1 ct. Hi-Mil Sher-Tar Epoxy @ 16.0 - 20.0 mils dft

**Epoxy Topcoat, atmospheric:**

1 ct. Zinc Clad II Ethyl Silicate @ 3.0 - 5.0 mils dft

1-2 cts. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft/ct

**Epoxy Topcoat, atmospheric:**

1 ct. Zinc Clad II Ethyl Silicate @ 3.0 - 5.0 mils dft

2 cts. Tile-Clad HS Epoxy @ 3.0 - 4.0 mils dft/ct

**Urethane Topcoat, atmospheric:**

1 ct. Zinc Clad II Ethyl Silicate @ 3.0 - 5.0 mils dft

1 ct. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft

1 ct. Corothane II Polyurethane @ 2.0 - 4.0 mils dft

**NOTE:** 1 ct. of DTM Wash Primer can be used as an intermediate coat under recommended topcoats to prevent pinholing.

The systems listed above are representative of the product's use. Other systems may be appropriate.

**Surface**

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

**Minimum recommended surface preparation:**

Iron &amp; Steel

Atmospheric:

SSPC-SP6, 2 mil profile

Immersion:

SSPC-SP10, 2 mil profile

Galvanizing:

SSPC-SP7

Weathered Zinc Rich Primer:

Clean, dry, sound

Do not tint.

Color: Gray-green.

**Temperature:**

air and surface:

0°F minimum, 120°F maximum

material:

40°F minimum

At least 5°F above dew point

Relative humidity:

10% - 90%

Refer to product Application Bulletin for detailed application information.

**Packaging:**

5 gallons mixed

Part E:

3.75 gallons in a 5 gallon can

Part F:

73 lb zinc dust

Weight per gallon:

20.9 ± 0.2 lb, mixed

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

**SHERWIN  
Williams***Industrial and Marine  
Coatings*

6.02A

**ZINC CLAD™ II ETHYL SILICATE  
INORGANIC ZINC-RICH COATING**PART E B69V3  
PART F B69D11BINDER  
ZINC DUST**APPLICATION BULLETIN**

Revised 1/97

**SURFACE PREPARATION**

Zinc rich coatings require direct contact between the zinc pigment in the coating and the metal substrate for optimum performance. Surface must be dry, free from oil, dirt, dust, mill scale, or other contaminants to ensure adequate adhesion.

**Iron & Steel (atmospheric service)**

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Remove all weld spatter and round all sharp edges by grinding to a minimum 1/4" radius. Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

**Iron & Steel (immersion service)**

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Remove all weld spatter and round all sharp edges by grinding to a minimum 1/4" radius. Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

**Galvanized Steel**

Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1 (recommended solvent is VM&P Naphtha). When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

**Weathered Zinc-Rich Primer**

Remove zinc salts by either high pressure water washing and scrubbing with stiff bristle brush or sweep blast followed by water flush. Allow to dry.

**Note:** If blast cleaning with steel media is used, an appropriate amount of steel grit blast media may be incorporated into the work mix to render a dense, angular 1.5 - 2.0 mil surface profile. This method may result in improved adhesion and performance.

**Temperature:**

air and surface: 0°F minimum, 120°F maximum  
material: 40°F minimum  
At least 5°F above dew point

**Relative humidity:**

10% - 90%

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

**Reducer/Clean Up**

Below 80°F ..... Xylene, R2K4  
Above 80°F ..... Reducer #54, R7K58

**Airless Spray**

(use Teflon packings and continuous agitation)

Pressure ..... 1800 - 2000 psi  
Hose ..... 3/8" ID  
Tip ..... .017" - .021"  
Reduction ..... as needed up to 10% by volume

**Conventional Spray**

(continuous agitation required)

Gun ..... Binks 95  
Fluid Nozzle ..... 66  
Air Nozzle ..... 63PB  
Atomization Pressure ... 30 - 40 psi  
Fluid Pressure ..... 10 - 20 psi  
Reduction ..... as needed up to 10% by volume

Keep pressure pot at level of applicator to avoid blocking of fluid line due to weight of material. Blow back coating in fluid line at intermittent shutdowns, but continue agitation at pressure pot.

Brush ..... For touch-up only.

If specific application equipment is listed above, equivalent equipment may be substituted.

**SHERWIN  
Williams**

6.02A

*Industrial and Marine  
Coatings***ZINC CLAD™ II ETHYL SILICATE  
INORGANIC ZINC-RICH COATING****PART E B69V3  
PART F B69D11****BINDER  
ZINC DUST****APPLICATION BULLETIN****APPLICATION PROCEDURES**

Surface preparation must be completed as indicated. Zinc Clad II comes in 2 premeasured containers which when mixed provides 5 gallons of ready-to-apply material.

**Mixing Instructions:** Thoroughly agitate Binder Part E. Using continuous air driven agitation, slowly mix all of Zinc Dust Part F into all of Binder Part E until mixture is completely uniform. After mixing, pour mixture through 30-60 mesh screen. Mixed material must be used within 8 hours. Do not mix previously mixed material with new. If reducer solvent is used, add only after both components have been thoroughly mixed.

Continuous agitation of mixture during application is required, otherwise zinc dust will quickly settle out.

Apply paint at the recommended film thickness and spreading rate as indicated below:

**Recommended Spreading Rate per coat:**

Wet mils:	5.0 - 8.0
Dry mils:	3.0 - 5.0
Coverage:	200 - 332 sq ft/gal approximate

Note: Brush application is for stripe coating and small areas only.

**Drying Schedule 8.0 mils wet @ 60% RH:**

⊕ 77°F

Rain resistant:	20-30 minutes
To touch:	15 minutes
To handle:	1-2 hours
To recoat:	18 hours
To cure:	7 days
Immersion service:	14 days

Drying time is temperature, humidity, and film thickness dependent.

Pot Life: 8 hours ⊕ 77°F

Sweet-in-Time: None required

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

**Topcoating:**

Note minimum cure times at normal conditions before topcoating. Longer drying periods are required if primer cannot be water mist sprayed when humidity is low.

Occasionally topcoats will pinhole or delaminate from zinc-rich coatings. This is usually due to poor ambient conditions or faulty application of topcoats. This can be minimized by:

- Providing adequate ventilation and suitable application and substrate temperature.
- Avoid dry spray of topcoat.
- Applying a wet full coat, but at minimum film build, prior to applying a complete full coat.

(continued in next column)

**PERFORMANCE**

- If pinholing develops, apply a mist coat of the topcoat, reduced up to 50%. Allow 10 minutes flash off and follow with a full coat.

**Recoating itself:** Recoat preferably when the first coat is in dry-to-tack state. Reduce second or touch-up by 15% with R7K58. If first coat has weathered and exhibits salt formation, salts should be removed per surface preparation recommendations.

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and performance.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Xylene, R2K4.

Keep pressure pot at level of applicator to avoid blocking of fluid line due to weight of material. Blow back coating in fluid line at intermittent shutdowns, but continue agitation at pressure pot.

Application above recommended film thickness may result in mud cracking.

Not recommended for severe acid or alkali exposures.

Oil base, alkylid, epoxy ester, and silicone alkylid topcoats are not recommended.

Polyurethane topcoats require a tie coat of catalyzed epoxy.

Topcoats should not be applied until coating is fully cured. Check cure by doing 50 MEK rubs. No zinc or only slight traces should be visible. Coin hardness test can also be used.

Refer to Product Information sheet for additional performance characteristics and properties.

**CLEAN UP INSTRUCTIONS**

Clean spills and splatters immediately with Xylene, R2K4. Clean tools immediately after use with Xylene, R2K4. Follow manufacturer's safety recommendations when using any solvent.

**SAFETY**

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.



Industrial and Marine Coatings

# HEAVY DUTY EPOXY

PART C  
PART D

567W307  
B67-300  
B60V3

SERIES  
HARDENER

## PRODUCT INFORMATION

Revised 1/97

Product Description	Remarks														
<p><b>HEAVY DUTY EPOXY</b> is a 60% solids polyamide/biaphenol A epoxy coating formulated to achieve high film build with high performance in atmospheric exposure.</p> <ul style="list-style-type: none"> <li>• Easy maintenance</li> <li>• High build for economical application</li> <li>• Suitable for use in USDA inspected facilities</li> <li>• Chemical resistant</li> </ul>	<p>For use over prepared substrates such as steel, aluminum, galvanizing, and masonry in industrial environments.</p> <ul style="list-style-type: none"> <li>• Heavy duty structural coating</li> <li>• Chemical resistant equipment coating</li> <li>• Paper mills</li> <li>• Marine applications</li> <li>• Refineries</li> <li>• Power plants</li> <li>• Offshore structures</li> </ul> <p>Not intended for architectural applications.</p>														
Product Characteristics	Performance Characteristics														
<p><b>Finish:</b> Low Sheen, 20 - 30 units at 60°</p> <p><b>Color:</b> Wide range of colors available</p> <p><b>Volume Solids:</b> 60% ± 2%, mixed, may vary by color</p> <p><b>Weight Solids:</b> 75% ± 2%, mixed</p> <p><b>VOC (calculated):</b>            Pure White, mixed            Unreduced: 335 g/L; 2.79 lb/gal            Reduced 12 1/2%: 392 g/L; 3.27 lb/gal</p> <p><b>Mix Ratio:</b> 4:1 by volume</p> <p><b>Recommended Spreading Rate per coat:</b></p> <table border="0"> <tr> <td>Wet mils:</td> <td>9.0 - 12.0</td> </tr> <tr> <td>Dry mils:</td> <td>5.0 - 7.0</td> </tr> <tr> <td>Coverage:</td> <td>135 - 192 sq ft/gal approximate</td> </tr> </table>	Wet mils:	9.0 - 12.0	Dry mils:	5.0 - 7.0	Coverage:	135 - 192 sq ft/gal approximate	<p><b>System Tested:</b> (unless otherwise indicated)  <b>Substrate:</b> Steel  <b>Surface Preparation:</b> SSPC-SP6  <b>Finish:</b> 1 ct. Heavy Duty Epoxy @ 6.0 mils dft</p> <p><b>Abrasion Resistance:</b>  <b>Method:</b> ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load  <b>Result:</b> 153 mg loss</p> <p><b>Adhesion:</b>  <b>Method:</b> ASTM D4541  <b>Result:</b> 700 psi</p> <p><b>Direct Impact Resistance:</b>  <b>Method:</b> ASTM G14  <b>Result:</b> 84 in. lbs.</p> <p><b>Dry Heat Resistance:</b>  <b>Method:</b> ASTM D2485  <b>Result:</b> 200°F (discolors)</p> <p><b>Exterior Durability:</b>  <b>Method:</b> 1 year at 45° South  <b>Result:</b> Excellent (chalks)</p> <p><b>Flexibility:</b>  <b>Method:</b> ASTM D522, 180° bend, 1" mandrel  <b>Result:</b> Passes</p> <p><b>Moisture Condensation Resistance:</b>  <b>Method:</b> ASTM D4585, 100°F, 2500 hours  <b>Result:</b> Passes</p> <p><b>Pencil Hardness:</b>  <b>Method:</b> ASTM D3363  <b>Result:</b> 3H</p> <p><b>Salt Fog Resistance:</b>  <b>Method:</b> ASTM B117, 1500 hours  <b>Result:</b> Passes</p> <p><b>Wet Heat Resistance:</b>  <b>Method:</b> Non-Immersion  <b>Result:</b> 140°F</p>								
Wet mils:	9.0 - 12.0														
Dry mils:	5.0 - 7.0														
Coverage:	135 - 192 sq ft/gal approximate														
<p><b>NOTE:</b> Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.</p> <p><b>Drying Schedule 10.0 mils wet @ 50% RH:</b></p> <p style="text-align: center;">@ 77°F</p> <table border="0"> <tr> <td>To touch:</td> <td>1 hour</td> </tr> <tr> <td>To handle:</td> <td>4 hours</td> </tr> <tr> <td>To recoat:</td> <td>minimum: 8 hours maximum: 30 days</td> </tr> <tr> <td>To cure:</td> <td>10 days</td> </tr> </table> <p>If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.</p> <p><b>Pot Life:</b></p> <table border="0"> <tr> <td>@ 55°F</td> <td>@ 77°F</td> <td>@ 95°F</td> </tr> <tr> <td>12 hours</td> <td>8 hours</td> <td>6 hours</td> </tr> </table> <p><b>Sweat-in-Time:</b> 30 minutes @ 77°F, 50% RH</p> <p><b>Shelf Life:</b> 36 months, unopened, at 77°F</p> <p><b>Flash Point:</b> 85°F, PMCC, mixed</p> <p><b>Reducer/Clean Up:</b>            Below 80°F: Reducer #54, R7K54            Above 80°F: Reducer #58, R7K58</p>	To touch:	1 hour	To handle:	4 hours	To recoat:	minimum: 8 hours maximum: 30 days	To cure:	10 days	@ 55°F	@ 77°F	@ 95°F	12 hours	8 hours	6 hours	<p>Epoxy coating may darken or yellow following application and curing.</p>
To touch:	1 hour														
To handle:	4 hours														
To recoat:	minimum: 8 hours maximum: 30 days														
To cure:	10 days														
@ 55°F	@ 77°F	@ 95°F													
12 hours	8 hours	6 hours													



*Industrial and Marine  
Coatings*

# HEAVY DUTY EPOXY

PART C B67-300  
PART D B60V3

SERIES  
HARDENER

## PRODUCT INFORMATION

### RECOMMENDED SYSTEMS

#### Steel, epoxy primer:

- 1 ct. Macropoxy Primer @ 6.0 - 8.0 mils dft  
1-2 cts. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft/ct

#### Steel, zinc rich primer:

- 1 ct. Zinc Clad Primer @ 3.0 - 4.0 mils dft  
1-2 cts. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft/ct

#### Steel, universal primer:

- 1 ct. Kern Bond HS Metal Primer  
@ 2.0 - 5.0 mils dft  
1-2 cts. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft/ct

#### Aluminum, self prime:

- 1-2 cts. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft/ct

#### Concrete, smooth:

- 1 cts. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft/ct

#### Concrete Block:

- 1 ct. Heavy Duty Block Filler @ 10.0 - 15.0 mils dft  
or  
1 ct. Kern Cat-Coat Epoxy Filler/Sealer  
@ 10.0 - 30.0 mils dft  
1-2 cts. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft/ct

#### Galvanized, self prime:

- 1-2 cts. Heavy Duty Epoxy @ 5.0 - 7.0 mils dft/ct

### SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

- \* Iron & Steel: SSPC-SP2 or SP3
- Aluminum: SSPC-SP1
- Galvanizing: SSPC-SP1
- Concrete and Masonry: Cured, clean, dry, sound

\* Primer Required

### COLOR AVAILABILITY/TINTING

Tint with H01s 844 at 75% strength into Part A. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Color: Wide range of colors possible.

### APPLICATION CONDITIONS

- Temperature: 55°F minimum, 120°F maximum  
(air, surface, and material)  
At least 5°F above dew point
- Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

### ORDERING INFORMATION

- Packaging:  
Part A: 4 gallon kit  
Part B: 1 gallon
- Weight per gallon: 12.53 ± 0.2 lb, mixed

### SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

The systems listed above are representative of the product's use. Other systems may be appropriate.



*Industrial and Marine  
Coatings*

4.46A

# HEAVY DUTY EPOXY

PART C  
PART D

B67-300  
B60V3

SERIES  
HARDENER

## APPLICATION BULLETIN

Revised 1/87

### SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

#### Iron & Steel

Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Remove all weld spatter and round all sharp edges by grinding to a minimum 1/4" radius. Prime any bare steel within 8 hours or before flash rusting occurs.

#### Aluminum

Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1.

#### Galvanized Steel

Allow to weather a minimum of six months prior to coating. Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1 (recommended solvent is VM&P Naphtha). When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

#### Masonry and Block

Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F. Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with ArmorSeal Crack Filler. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Laitance must be removed by etching with a 10% muriatic acid solution and thoroughly neutralized with water. Brick must be allowed to weather for one year prior to surface preparation and painting.

#### Concrete and Cement Floors

All surfaces must be cured according to the supplier's recommendations. Remove all form release and curing agents by sandblasting, shot blasting, mechanical scarification, or suitable chemical means. Patch holes or cracks with an appropriate filler. Test for moisture or dampness by taping an 18 inch by 18 inch plastic sheet (4 mils thick) on the bare surface, sealing all of the edges. After a minimum of 18 hours, inspect for moisture, discoloration, or condensation on the concrete or the underside of the plastic. If moisture is present, the source must be located and the cause corrected prior to painting.

### Application Conditions

Temperature: 55°F minimum, 120°F maximum  
(air, surface, and material)  
At least 5°F above dew point

Relative humidity: 85% maximum

### Application Equipment

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

#### Reducer/Clean Up

Below 80°F ..... Reducer #54, R7K54  
Above 80°F ..... Reducer #58, R7K58

#### Airless Spray

Pressure ..... 2400 psi  
Hose ..... 1/4" - 3/8" ID  
Tip ..... .015" - .017"  
Filter ..... 60 mesh  
Reduction ..... as needed up to 12 1/2% by volume

#### Conventional Spray

Gun ..... Binks 95  
Fluid Nozzle ..... 66  
Air Nozzle ..... 63PB  
Atomization Pressure ... 80 psi  
Fluid Pressure ..... 20 - 25 psi  
Reduction ..... as needed up to 12 1/2% by volume

#### Brush

Brush ..... Natural Bristle  
Reduction ..... not recommended

#### Roller

Cover ..... 1/2" woven with phenolic core  
Reduction ..... not recommended

If specific application equipment is listed above, equivalent equipment may be substituted.





*Industrial and Marine  
Coatings*

4.46A

# HEAVY DUTY EPOXY

PART C  
PART D

B67-300  
B60V3

SERIES  
HARDENER

## APPLICATION BULLETIN

### APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with power agitation. Make certain no pigment remains on the bottom of the can. Then combine four parts by volume of Part C with one part by volume of Part D. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated. Re-stir before using.

If reducer solvent is used, add only after both components have been thoroughly mixed, after sweat-in.

Apply paint at the recommended film thickness and spreading rate as indicated below:

#### Recommended Spreading Rate per coat:

Wet mils:	9.0 - 12.0
Dry mils:	5.0 - 7.0
Coverage:	135 - 192 sq ft/gal approximate

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

#### Drying Schedule 10.0 mils wet @ 50% RH:

	② 77°F	
To touch:	1 hour	
To handle:	4 hours	
To recoat:	minimum: 6 hours	
	maximum: 30 days	
To cure:	10 days	

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

Pot Life:	② 55°F	② 77°F	② 95°F
	12 hours	8 hours	6 hours

Sweat-in-Time: 30 minutes @ 77°F, 50% RH

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

### PERFORMANCE

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #54, R7K54.

Not intended for architectural applications.

Refer to Product Information sheet for additional performance characteristics and properties.

### CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #54, R7K54. Clean tools immediately after use with Reducer #54, R7K54. Follow manufacturer's safety recommendations when using any solvent.

### SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.



*Industrial and Marine Coatings*

5.20

# COROTHANE® II

PART A  
PART A  
PART B

B65-400 SERIES *B65W400*  
B65-200 SERIES  
B60V2

GLOSS  
SATIN  
HARDENER

## PRODUCT INFORMATION

Revised 1/97

### Product Description

COROTHANE II is a 2-component, VOC compliant, aliphatic acrylic modified polyurethane designed for high performance use in industrial maintenance environments. The product provides a high build, durable finish with excellent exterior color and gloss retention.

- Retains its exterior appearance over a wide range of chemical, weather and mechanical conditions.
- A chemical and abrasion resistant equipment enamel.
- A gloss and color retentive heavy duty maintenance coating for use in "high visibility areas."
- Suitable for use in USDA inspected facilities.

### Recommended Uses

For use over prepared substrates in industrial environments, such as:

- Offshore platforms
- Rolling stock
- Paper mills
- Clean rooms
- Power plants
- Conveyors
- Refineries
- Marine Applications
- Exterior surfaces of steel tanks
- Structural steel
- Chemical processing equipment
- Exterior metal siding and trim
- Precipitator surfaces
- Oil field machinery
- Handrails

### Product Characteristics

**Finish:** Satin, 25 units at 60°  
Gloss, 75 units @ 60°

**Color:** Ultra White and a wide range of colors available, including safety colors

**Volume Solids:** Satin 60% ± 2%/Gloss 63% ± 2% mixed, may vary by color

**Weight Solids:** 76% ± 2%, mixed, may vary by color

**VOC (EPA method #24):** Satin, Pure White    Gloss, Pure White  
Unreduced: 340 g/L; 2.8 lb/gal    304 g/L; 2.54 lb/gal  
Reduced 10%: 388 g/L; 3.24 lb/gal    360 g/L; 3.0 lb/gal

**Mix Ratio:** 4:1 by volume

**Recommended Spreading Rate:**  
Wet mils: 3.0 - 7.0  
Dry mils: 2.0 - 4.0  
Coverage: 230 - 500 sq ft/gal approximate

Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

### Performance

**System Tested:** (unless otherwise indicated)  
Substrate: Steel  
Surface Preparation: SSPC-SP6  
Primer: 1 ct. Recoatable Epoxy Primer @ 4.0 mils dft  
Finish: 1 ct. Corothane II @ 3.0 mils dft

**Abrasion Resistance:**  
Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load  
Result: 142 mg loss

**Adhesion:**  
Method: ASTM D4541  
Result: 1800 psi

**Direct Impact Resistance:**  
Method: ASTM G14  
Result: 85 in. lbs.

**Dry Heat Resistance:**  
Method: ASTM D2485  
Result: 200 °F

**Exterior Durability:**  
Method: 1 year at 45° South  
Result: Excellent

**Flexibility:**  
Method: ASTM D522, 180° bend, 7/16" mandrel  
Result: Passes

**Moisture Condensation Resistance:**  
Method: ASTM D4585, 100°F, 1000 hours  
Result: No blisters, rust, delamination, or rust creepage at scribe

**Pencil Hardness:**  
Method: ASTM D3363  
Result: B

**Salt Fog Resistance:**  
Method: ASTM B117, 500 hours  
Result: No cracking, blistering, softening, or delamination  
No more than 1/64" rust creepage at scribe

**Thermal Shock:**  
Method: ASTM D2246, 5 cycles  
Result: Excellent

**SATIN: Drying Schedule @ 4.0 mils wet @ 80% RH:**

	40°F	77°F	120°F
To touch:	6 hours	2 hours	1 hour
To handle:	24 hours	8 hours	4 hours
To recoat:			
minimum:	24 hours	8 hours	4 hours
maximum:	14 days	14 days	14 days
To cure:	14 days	10 days	7 days

**GLOSS: Drying Schedule @ 4.0 mils wet @ 50% RH:**

	40°F	77°F	120°F
To touch:	4 hours	30 minutes	20 minutes
To handle:	44 hours	8 hours	3 hours
To recoat:			
minimum:	44 hours	8 hours	3 hours
maximum:	14 days	14 days	14 days
To cure:	14 days	10 days	7 days

**Pot Life:** Satin: 8 hours    4 hours    2 hours  
Gloss: 8 hours    6 hours    2 hours

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

**Sweat-In-Time:** none required

**Shelf Life:** 12 months, unopened, at 77°F

**Flash Point (Seta Flash):** Satin 80°F, mixed    Gloss 95°F, mixed

**Reducer/Clean Up:** Reducer #58, R7K58



*Industrial and Marine  
Coatings*

5.20

# COROTHANE® II

PART A B65-400 SERIES  
PART A B65-200 SERIES  
PART B B60V2

GLOSS  
SATIN  
HARDENER

## PRODUCT INFORMATION

### RECOMMENDED SYSTEMS

**Steel: Universal Primer**

1 ct. Kem Bond HS Primer @ 2.0 - 5.0 mils dft  
1-2 cts. Corothane II @ 2.0 - 4.0 mils dft/ct

**Steel: Epoxy Primer**

1 ct. Recoatable Epoxy Primer @ 4.0 - 6.0 mils dft  
1-2 cts. Corothane II @ 2.0 - 4.0 mils dft/ct

**Steel: (Epoxy Mastic Primer)**

1 ct. Epoxy Mastic Aluminum II or Epoxy Mastic Enamel  
@ 6.0 - 8.0 mils dft  
1-2 cts. Corothane II @ 2.0 - 4.0 mils dft/ct

**Steel: (Inorganic Zinc Rich Primer)**

1 ct. Zinc-Clad II HS Ethyl Silicate @ 3.0 - 5.0 mils dft  
1 ct. Recoatable Epoxy Primer @ 4.0-8.0 mils dft  
1-2 cts. Corothane II @ 2.0 - 4.0 mils dft/ct

**Galvanized Metal:**

1 ct. Tile-Clad High Solids @ 2.5 - 4.0 mils dft  
1-2 cts. Corothane II @ 2.0 - 4.0 mils dft/ct

**Aluminum:**

1 ct. DTM Wash Primer @ 0.7 - 1.3 mils dft  
1-2 cts. Corothane II @ 2.0 - 4.0 mils dft/ct

**Concrete:**

1 ct. Heavy Duty Block Filler @ 10.0 - 18.0 mils dft  
1-2 cts. Corothane II @ 2.0 - 4.0 mils dft/ct

### SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

- \* Iron & Steel: SSPC-SP6, 2 mil profile
- \* Aluminum: SSPC-SP1
- \* Galvanizing: SSPC-SP1
- \* Concrete Masonry: Cured, clean, dry, sound

\* Primer required

### COLOR AVAILABILITY/TINTING

Tint with Huls 844 colorants only into Part A at 100% tint strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Color: Ultra White and a wide range of colors available, including safety colors

### APPLICATION CONDITIONS

Temperature: 40°F minimum, 120°F maximum  
(air, surface, and material)  
At least 5°F above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

### ORDERING INFORMATION

Packaging:  
Part A: 1 gallon and 4 gallon kits  
Part B: 1 quart and 1 gallon

Weight per gallon: Gloss 10.9 ± 0.2 lb  
Satin 11.9 ± 0.2 lb  
mixed, may vary with color

### SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

The systems listed above are representative of the product's use. Other systems may be appropriate.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.



*Industrial and Marine  
Coatings*

PART A  
PART A  
PART B

B65-400 SERIES  
B65-200 SERIES  
B60V2

5.20A  
**COROTHANE® II**  
GLOSS  
SATIN  
HARDENER

## APPLICATION BULLETIN

Revised 1/97

### SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

#### Iron & Steel

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Remove all weld spatter and round all sharp edges by grinding to a minimum 1/4" radius. Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

#### Aluminum

Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required

#### Galvanized Steel

Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

#### Concrete and Masonry

Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F. Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with ArmorSeal Crack Filler. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Laitance must be removed by etching with a 10% muriatic acid solution and thoroughly neutralized with water.

Primer required. Brick must be allowed to weather for one year prior to surface preparation and painting.

### APPLICATION CONDITIONS

Temperature: 40°F minimum, 120°F maximum  
(air, surface, and material)  
At least 5°F above dew point

Relative humidity: 85% maximum

### APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

#### Reducer/Clean Up

Spray ..... Reducer #58, R7K58  
Brush and Roll ..... Reducer #216, R7K216

#### Airless Spray

Pressure ..... 2400 psi  
Hose ..... 3/8" ID  
Tip ..... .015" - .017"  
Filter ..... 80 mesh  
Reduction ..... as needed up to 10% by volume

#### Conventional Spray

Gun ..... Binks 95  
Fluid Nozzle ..... 63 B  
Air Nozzle ..... 69 PB  
Atomization Pressure ... 60 - 70 psi  
Fluid Pressure ..... 20 - 25 psi  
Reduction ..... as needed up to 10% by volume

#### Brush

Brush ..... Natural Bristle  
Reduction ..... not recommended

#### Roller

Cover ..... 3/8" woven with phenolic core  
Reduction ..... not recommended

If specific application equipment is listed above, equivalent equipment may be substituted.



*Industrial and Marine  
Coatings*

PART A  
PART A  
PART B

B65-400 SERIES  
B65-200 SERIES  
B60V2

5.20A

**COROTHANE® II**

GLOSS  
SATIN  
HARDENER

## APPLICATION BULLETIN

### APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with power agitation. Make certain no pigment remains on the bottom of the can. Then combine 4 parts by volume of Part A with 1 part by volume of Part B. Thoroughly agitate the mixture with power agitation for 5 minutes.

If reducer solvent is used, add only after both components have been thoroughly mixed.

Apply paint at the recommended film thickness and spreading rate as indicated below:

#### Recommended Spreading Rate:

Wet mils: 3.0 - 7.0  
Dry mils: 2.0 - 4.0  
Coverage: 230 - 500 sq ft/gal approximate

Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

SATIN: Drying Schedule @ 4.0 mils wet @ 50% RH:

	● 40°F	● 77°F	● 120°F
To touch:	8 hours	2 hours	1 hour
To handle:	24 hours	8 hours	4 hours
To recoat:			
minimum:	24 hours	8 hours	4 hours
maximum:	14 days	14 days	14 days
To cure:	14 days	10 days	7 days

GLOSS: Drying Schedule @ 4.0 mils wet @ 50% RH:

	● 40°F	● 77°F	● 120°F
To touch:	4 hours	30 minutes	20 minutes
To handle:	44 hours	8 hours	3 hours
To recoat:			
minimum:	44 hours	8 hours	3 hours
maximum:	14 days	14 days	14 days
To cure:	14 days	10 days	7 days
Pot Life: Satin:	8 hours	4 hours	2 hours
Gloss:	8 hours	6 hours	2 hours

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

Sweat-In-Time: none required

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

### PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #58, R7K58.

Mixed coating is sensitive to water. Use water traps in all air lines. Moisture contact can reduce pot life and affect gloss and color.

Refer to Product Information sheet for additional performance characteristics and properties.

### CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #58, R7K58. Clean tools immediately after use with Reducer #58, R7K58. Follow manufacturer's safety recommendations when using any solvent.

### SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.