

City of Lynchburg  
Procurement Division  
900 Church Street  
Lynchburg, Virginia 24504  
Telephone No.: (434) 455-3970  
Fax No.: (434) 845-0711

**Addendum for Invitation for Bids  
MID-DOWNTOWN PARKING DECK PAINTING OF CORNER STAIR**

**2015-970**

Date: 04/16/2015  
From: Lisa Moss, Buyer VCA  
RE: Addendum No. 1

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This Addendum supplements and amends the original Plans and Specifications and shall be taken into account in preparing proposals and shall become a part of the Contract Documents. The Bidder shall indicate receipt of this Addendum and all previously issued Addenda on the Bid Form.

1. **Clarification made by architect: The scope of painting includes all of the painting of the steel structure at the stair tower this includes landings, structural steel columns, beams, channels, angles, plates, railings and stairs. Colors will be the same.**
2. **Clarification made by architect: All steel angles supporting the steel plate landings will need to be removed (un-bolted, SSPC-SP10 cleaned, prime-painted and re-installed). Discussion at the pre-bid about removing only one angle has been rescinded.**
3. **Clarification made by architect: Steel plates at landings will be welded to angles at 2 locations. Plug weld at top 1/2" diameter or fillet weld 1/2" long. No test on welds are required. This is for purpose of keeping plate stable for the application of the epoxy filler at landings.**
4. **Clarification made by architect: Preparation of steel where rust exist will require SSPC-SP10. Method to achieve this requirement can be by means of sandblasting or other acceptable means to meet the qualification.**

**Brush Off Blast SSPC-SP10 Definition:**

**In this method, all oil, grease, dirt, mill scale, rust, corrosion products, oxides, paint or other foreign matter have been completely removed from the surface by abrasive blasting, except for very light shadows, very slight streaks or slight discolorations caused by rust stain, mill scale oxides or slight, tight residues of paint or coating. At least 95% of each square inch of surface area shall be free of all visible residues, and the remainder shall be limited to the light discolorations mentioned above. From a practical standpoint, this is probably the best quality surface preparation that can be expected to today for existing plant facility maintenance work.**



**Photo of SSPC- SP10 below:**

5. Clarification made by architect: Maximum thickness of epoxy floor leveler is 1/4" average thickness on each landing for bidding purposes.
6. Clarification made by architect: Remove aluminum expansion joint plate to finishing the landings and re-install when completed.
7. Clarification made by architect: Sealant required at the perimeter exterior edge of the angle to W-shape beam connection.
8. Clarification made by architect: Landing plates do not have to be removed, only the angles supporting the landing plate.
9. Clarification made by architect: The steel plate landings at the south end of stair are to be repaired in same manner as the steel plate landings at the north end of stair. (for orientation, north is toward Commerce Street).
10. Potential bidders requested the existing structural steel shop drawing be made available. Shop drawings attached.
11. Potential bidders requested the existing paint material submittal be made available. Submittal attached.
12. Notes from the Pre Bid meeting are attached for information purposes only and do not change or revise the bid documents.
13. Parking spaces and storage areas will be coordinated with the awarded contractor prior to start of the project.
14. Sandblasting without full containment and negative pressure is not allowed. Are funds available to cover costs for full containment?  
**Performance based method as clarified by architect in this addendum.**
15. Is there going to be a substitution of Macropoxy with Mastic Epoxy?  
**For bidding purposes the specifications in the project manual shall be used.**
16. How much welding if any will be required?  
**Scope as clarified by architect in this addendum.**
17. Designated parking spaces, located adjacent to stairwell on the top and bottom levels of the parking deck, will be coned off and reserved prior to start of the project. These spaces will also be used as a lay down area along with the locked storage cage on the bottom level. The City will not be responsible for securing this area or for any equipment or material stored on site. Contractor shall be responsible for the security of any equipment or material stored in these spaces.

*Company Name:* \_\_\_\_\_ *Address:* \_\_\_\_\_ *Date:* \_\_\_\_\_

*Authorized Signature:* \_\_\_\_\_ *Title:* \_\_\_\_\_

*Print Name:* \_\_\_\_\_ *Telephone No.:* \_\_\_\_\_

*Fax No.:* \_\_\_\_\_



Pre-bid meeting occurred at the Midtown parking deck at the corner of 9<sup>th</sup> and Commerce Streets on April 6, 2015. Meeting location at top level deck.

The following took place:

1. Introductions were made. List of attendees can be located at [www.lynchburgva.gov/current-solicitations](http://www.lynchburgva.gov/current-solicitations) under the project name.
2. A cursory outline of procurement procedures were noted.
3. Visual review and of existing construction and required repairs as illustrated in the contract documents were reviewed.
4. Reviewed the locations of possible contractor parking (Permit required, but there is no cost to contractor for the permit).
5. Reviewed location of temporary water and electrical connection (115v available).

End of notes.

DATE SUBMITTED:

Thursday, February 28, 2008

PROJECT:

City Of Lynchburg  
Mid- Downtown Parking Deck  
Corner Stair Replacement

ARCHITECT:

Craddock/Cunningham  
Lynchburg, Va.  
c/o Jim Vernon

GENERAL CONTRACTOR:

Robertson construction  
Lynchburg, Va.

SUB-CONTRACTOR:

Schrader Painting

Specification Section 09960

The equipment and or material shown and marked in this submittal is that proposed to be incorporated into this project. It is in compliance with the contract drawings and specifications unless otherwise shown in bold face type or lettering and listed on a page headed "**Departures from drawings and specifications**" and can be installed in the allocated spaces.

Reviewed By :

*Alex Mason*

Dated: Thursday, February 28, 2008



**SHERWIN  
WILLIAMS.**

SHERWIN-WILLIAMS  
2010 ENTERPRISE DR  
FOREST, VA 24551 2652  
(434) 316-9052

03/05/2008

SCHRADER PAINTING INC\* C S  
PO BOX 11213  
LYNCHBURG VA 24506 1213

Re: Submittal for Mid Downtown Parking Deck

Dear Charles -:

Thank you for considering Sherwin-Williams products for the Mid Downtown Parking Deck project. Included in this package is the Sherwin-Williams submittal for the above referenced project.

Should you require assistance or have any questions or concerns, please contact me at (434) 509-7913 or e-mail me at swrep6249@sherwin.com.

Sincerely,

ANDREW C BRADT  
Sherwin-Williams  
Sales Representative

<input type="checkbox"/> Approved	Fabrication/installation may be undertaken. Approval does not authorize changes to the Contract Sum or Contract Time.
<input checked="" type="checkbox"/> Approved as corrected	
<input type="checkbox"/> Revise Resubmit	Fabrication and/or installation MAY NOT be undertaken. In resubmitting, limit corrections to items marked.
<input type="checkbox"/> Rejected	
Review / approval neither extends nor alters any contractual obligations of the Architect or Contractor.	
<b>CRADDICK ARCHITECTURE</b> <b>ARCHITECTS, P.C.</b> 10 North 38th St Lynchburg, VA 24504 (434) 346-3456	
By 	Date <b>3/12/08</b>

SCHEDULE

**Exterior Finishes**

**Masonry**

Primer: B71W00111 - PRO Industrial Hi-Bild Waterbased Catalyzed Epoxy Extra White/Tint Base  
Coat 1: B71W00111 - PRO Industrial Hi-Bild Waterbased Catalyzed Epoxy Extra White/Tint Base

*INTERIOR MASONRY ONLY.  
PROVIDE SEPARATE SUBMITTAL FOR EXTERIOR ELASTOMERIC COATINGS*

**Steel**

Primer: B67W00045 - Recoatable Epoxy Primer Low VOC White Part A  
Coat 1: B65W00351 - Hi-Solids Polyurethane Semi-Gloss Extra White/Tint Base

**Galvanized**

Primer: B67W00045 - Recoatable Epoxy Primer Low VOC White Part A  
Coat 1: B65W00351 - Hi-Solids Polyurethane Semi-Gloss Extra White/Tint Base

END OF SECTION

## **SURFACE PREPARATION**

### **1) Galvanized Metal**

Allow to weather a minimum of 6 months prior to coating. Clean per SSPC-SP1 using detergent and water or a degreasing cleaner, then prime as required. When weathering is not possible or the surface has been treated with chromate's or silicates, first Solvent Clean per SSPC-SP1 and apply a test area, priming as required. Allow the coating to dry at least one week before testing. If adhesion is poor, Brush Blast per SSPC-SP7 is necessary to remove these treatments.

**END OF SPECIFICATION**

## Data Pages



# PRO INDUSTRIAL™

## 113.20 HI-BILD WATERBASED CATALYZED EPOXY

PART A  
PART B  
PART B

B71-100  
B71V100  
B71V110

SERIES  
HIGH LUSTER HARDENER  
LOW LUSTER HARDENER

### CHARACTERISTICS

**Pro Industrial Hi-Bild Waterbased Catalyzed Epoxy** is a high performance, interior/exterior, VOC compliant, low odor, high film build, two-component, water based acrylic epoxy. It dries to a tough, tile-like finish that exhibits excellent durability and performance properties.

**Pro Industrial Hi-Bild Waterbased Catalyzed Epoxy** resists: moisture, abrasion, select chemicals, impact, and yellowing.

**Color:** Most colors  
**Recommended Spread Rate per coat:**  
Wet mils: 10.0 - 15.0  
Dry mils: 4.0 - 6.0  
Coverage: 110 - 170 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: @ 50°F @ 77°F @ 120°F**  
To touch: 2 hrs 1 hr 30 min  
To handle 16 hrs 12 hrs 8 hrs  
To recoat:

minimum: 4 hrs 2 hrs 1 hr  
maximum: 30 days 30 days 30 days  
To cure: 30 days 14 days 7 days

If maximum recoat time is exceeded, abrade surface before recoating.

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

**Mix Ratio:** 4:1  
**Pot Life:** 8 hours @ 77°F, 50% RH  
**Sweat-in Time:** 15 min. @ 77°F, 50% RH

**Finish:** High and Low Luster  
**Flash Point:** 230°F, SETA, mixed  
**Tint Part A with BAC or EnviroToner at:**  
**Base oz/gal Strength**  
Extra White 0-5 100%  
Deep Base 4-12 100%  
Ultradeep Base 4-12 100%

**B71W111 (may vary by color)**

**VOC (EPA Method 24):**  
<250 g/L 2.08 lb/gal, mixed  
**Volume Solids:** 42% ± 2%, mixed  
**Weight Solids:** 52% ± 2%, mixed  
**Weight per Gallon:** lb

### SPECIFICATIONS

#### Steel

1 ct: Waterbased Tile-Clad Primer  
1-2 cts: Pro Industrial Hi-Bild WB  
Catalyzed Epoxy

#### Steel

1 ct: DTM Acrylic Primer/Finish  
1-2 cts: Pro Industrial Hi-Bild WB  
Catalyzed Epoxy

#### Steel

1 ct: Pro-Cryl Universal Primer  
1-2 cts: Pro Industrial Hi-Bild WB  
Catalyzed Epoxy

#### Drywall:

1 ct: PrepRite 200 Primer  
1-2 cts: Pro Industrial Hi-Bild WB  
Catalyzed Epoxy

#### Galvanized

2 cts: Pro Industrial Hi-Bild WB  
Catalyzed Epoxy

#### Masonry

1 ct: Heavy Duty Block Filler  
1-2 cts: Pro Industrial Hi-Bild WB  
Catalyzed Epoxy

#### Masonry, smooth

2 cts: Pro Industrial Hi-Bild WB  
Catalyzed Epoxy

#### System Tested:

Substrate: Steel  
Surface Preparation: SSPC-SP10/NACE 2  
Primer: 1 ct. WB Tile-Clad Epoxy Primer  
Finish: 1 ct. Pro Industrial Hi-Bild WB Catalyzed Epoxy

#### Adhesion:

Method: ASTM D4541  
Result: 751 psi

#### Exterior Durability:

Method: 1 year  
Result: Excellent, chalks

#### Pencil Hardness:

Method: ASTM D3363  
Result: HB

#### Thermal Shock:

Method: ASTM D2246, 12 cycles  
Result: Passes

#### Wind Driven Rain:

Method: Federal Spec. TT-C-555B  
Result: Passes

#### Hi-Bild WB Catalyzed Epoxy only

#### Abrasion Resistance:

Method: ASTM D4060, CS10 wheel,  
1000 cycles 1 kg load  
Result: 141 mg loss

#### Dry Heat Resistance:

Method: ASTM D2485  
Result: 180°F, intermittent 200°F

#### Flexibility:

Method: ASTM D522, 180° bend 1/8"  
mandrel  
Result: Passes

#### Impact Resistance, Direct:

Method: ASTM D2794  
Result: 42 in. lb.

#### Impact Resistance, Indirect:

Method: ASTM D2794  
Result: 24 in. lb.

Resists fumes, splash, and spillage of mild acids, alkalies, salts, aliphatic and aromatic hydrocarbon solvents, and lubricating oils (ASTM D3912).

113.20

# PRO INDUSTRIAL™

## HI-BILD WATERBASED CATALYZED EPOXY

PART A B71-100  
PART B B71V100  
PART B B71V110

SERIES  
HIGH LUSTER HARDENER  
LOW LUSTER HARDENER



**SHERWIN  
WILLIAMS.**

### SURFACE PREPARATION

**WARNING!** Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

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. Do not use hydrocarbon solvents for cleaning.

**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/NACE 3, 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. Prime any bare steel within 8 hours or before flash rusting occurs.

**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.

### SURFACE PREPARATION

**Concrete - New** - For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3. Surface must be clean, dry, sound, and offer sufficient profile to achieve adequate adhesion. Minimum substrate cure is 28 days at 75°F. Remove all form release agents, curing compounds, salts, efflorescence, laitance, and other foreign matter by sandblasting, shotblasting or mechanical scarification. Refer to ASTM D4260. Rinse thoroughly to achieve a final pH between 8.0 and 11.0. Allow to dry thoroughly prior to coating.

**Concrete - Old** - Surface preparation is done in much the same manner as new concrete; however, if the concrete is contaminated with oils, grease, chemicals, etc., they must be removed by cleaning with a strong detergent. Refer to ASTM D4258. Form release agents, hardeners, etc. must be removed by sandblasting, shotblasting or mechanical scarification. If surface deterioration presents an unacceptably rough surface, Kem Cati-Coat HS Epoxy Filler/Sealer is recommended to patch and resurface damaged concrete.

### APPLICATION

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 complaint with existing VOC regulations and compatible with the existing environmental and application conditions.

**Reducer/Clean Up** ..... Water  
**Airless Spray**  
Pressure ..... 2400 psi  
Hose ..... 3/8" ID  
Tip ..... .019" - .023"  
Filter ..... 60 mesh  
Reduction  
..... as needed up to 6% by volume  
**Brush** ..... Nylon/Polyester  
Reduction ..... Not recommended  
**Roller Cover** ..... 3/8" woven  
Reduction ..... Not recommended

### CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturers safety recommendations when using mineral spirits.

### CAUTIONS

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

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 water.

**Shelf Life:** 12 months, unopened  
Store indoors at 40°F to 100°F.

See label for additional cautions.

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Sheet. HOTW 11/15/2006 B71W111 10 00

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.



**Industrial  
&  
Marine  
Coatings**

# RECOATABLE EPOXY PRIMER LOW VOC

PART G  
PART H

B67-45  
B67V45

SERIES  
HARDENER

## PRODUCT INFORMATION

8/06

PRODUCT DESCRIPTION	RECOMMENDED USES
<p><b>Recoatable Epoxy Primer Low VOC</b> is a rust-inhibitive high build catalyzed polyamide/bisphenol A epoxy primer designed for fast dry and quick or extended recoatability. It is a low VOC product that contains solvents that are exempt from VOC emissions.</p> <ul style="list-style-type: none"> <li>• Long pot life</li> <li>• High build coating for economical application</li> <li>• One year recoatability</li> <li>• Suitable for use in USDA inspected facilities</li> <li>• Low temperature application - down to 35°F</li> <li>• Corrosion resistant</li> </ul>	<p>For use as a shop or field applied epoxy primer where a variable recoat window is required due to construction schedules, distribution logistics and environmental considerations. Affords flexibility in projects when completion schedules cannot be specified.</p> <ul style="list-style-type: none"> <li>• Primer for structural steel</li> <li>• Paper mills</li> <li>• Power plants</li> <li>• Marine applications</li> <li>• Storage tanks</li> </ul>
PRODUCT CHARACTERISTICS	PERFORMANCE CHARACTERISTICS
<p><b>Finish:</b> Flat</p> <p><b>Color:</b> Off-White</p> <p><b>Volume Solids:</b> 66% ± 2%, mixed</p> <p><b>Weight Solids:</b> 76% ± 2%, mixed</p> <p><b>VOC (EPA Method 24):</b> Unreduced: 100 g/L; 0.71 lb/gal mixed Reduced 5%: 100 g/L; 0.71 lb/gal</p> <p><b>Mix Ratio:</b> 1:1 by volume</p> <p><b>Recommended Spreading Rate per gal:</b> Wet mils: 6.0 - 9.0 Dry mils: 4.0 - 6.0 Coverage: 175 - 260 sq ft/gal approximate</p> <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 6.0 mils wet @ 50% RH: @ 77°F</b></p> <p>To touch: 15 minutes Tack free: 30 minutes To recoat: minimum: 2 hours maximum: 1 year To cure: 14 days</p> <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> 5 hours</p> <p><b>Sweat-in-Time:</b> 30 minutes</p> <p><b>Shelf Life:</b> 24 months, unopened Store indoors at 40°F to 100°F.</p> <p><b>Flash Point:</b> 88°F, PMCC, mixed</p> <p><b>Reducer:</b> R7K111</p> <p><b>Clean Up:</b> R7K111 or Reducer #54 (R7K54)</p>	<p><b>System Tested:</b> (unless otherwise indicated) Substrate: Steel Surface Preparation: SSPC-SP6/NACE 3 1 ct. Recoatable Epoxy Primer Low VOC @ 4.0 - 6.0 mils dft 1 ct. Acrolon 218 HS @ 4.0 - 6.0 mils dft</p> <p><b>Abrasion Resistance (primer only):</b> Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load Result: 200 mg loss</p> <p><b>Adhesion (primer only):</b> Method: ASTM D4541 Result: 1050 psi</p> <p><b>Corrosion Weathering:</b> Method: ASTM D5894, 12 cycles, 4368 hours Result: Rating 7 per ASTM D610 for Rusting Rating 10 per ASTM D714 for Blistering</p> <p><b>Direct Impact Resistance (primer only):</b> Method: ASTM D2794 Result: 60 in. lbs.</p> <p><b>Dry Heat Resistance (primer only):</b> Method: ASTM D2485, Method A, Quench Test Result: 250°F</p> <p><b>Flexibility (primer only):</b> Method: ASTM D522, 180° bend, 1" mandrel Result: Passes</p> <p><b>Moisture Condensation Resistance:</b> Method: ASTM D4585, 100°F, 2000 hours Result: Rating 10 per ASTM D610 for Rusting Rating 10 per ASTM D714 for Blistering</p> <p><b>Pencil Hardness (primer only):</b> Method: ASTM D3363 Result: 3H</p> <p><b>Salt Fog Resistance:</b> Method: ASTM B117, 5600 hours Result: Rating 10 per ASTM D610 for Rusting Rating 10 per ASTM D714 for Blistering</p>



**Industrial  
&  
Marine  
Coatings**

4.48

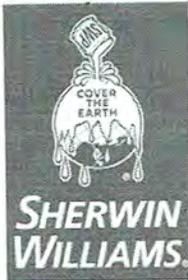
# RECOATABLE EPOXY PRIMER LOW VOC

PART G      B67-45  
PART H      B67V45

SERIES  
HARDENER

## PRODUCT INFORMATION

RECOMMENDED SYSTEMS	SURFACE PREPARATION
<p><b>Steel, catalyzed epoxy topcoat:</b>            1 ct.    Recoatable Epoxy Primer Low VOC                     @ 4.0 - 6.0 mils dft            2 cts.    Tile-Clad HS Epoxy @ 2.5 - 4.0 mils dft/ct</p> <p><b>Steel, polyurethane topcoat:</b>            1 ct.    Recoatable Epoxy Primer Low VOC                     @ 4.0 - 6.0 mils dft            1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p><b>Steel, acrylic epoxy topcoat:</b>            1 ct.    Recoatable Epoxy Primer Low VOC                     @ 4.0 - 6.0 mils dft            2 cts.    Water Based Catalyzed Epoxy                     @ 2.5 - 3.0 mils dft/ct</p> <p><b>Steel, acrylic topcoat:</b>            1 ct.    Recoatable Epoxy Primer Low VOC                     @ 4.0 - 6.0 mils dft            2 cts.    DTM Acrylic Coating @ 2.5 - 4.0 mils dft/ct</p> <p><b>Galvanized:</b>            1 ct.    Recoatable Epoxy Primer Low VOC                     @ 4.0 - 6.0 mils dft            2 cts.    Tile-Clad HS Epoxy @ 2.5 - 4.0 mils dft/ct</p>	<p>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.</p> <p>Refer to product Application Bulletin for detailed surface preparation information.</p> <p>Minimum recommended surface preparation:            Iron &amp; Steel:            SSPC-SP6/NACE 3, 2 mil profile            Galvanized:            SSPC-SP1</p>
	TINTING
	Do not tint.
	APPLICATION CONDITIONS
	<p>Temperature:              air and surface:        35°F minimum, 140°F maximum              material:                50°F minimum                                              At least 5°F above dew point</p> <p>Relative humidity:        85% maximum</p> <p>Refer to product Application Bulletin for detailed application information.</p>
	ORDERING INFORMATION
	<p>Packaging:                5 gallon containers</p> <p>Weight per gallon:        14.55 ± 0.2 lb, mixed</p>
	SAFETY PRECAUTIONS
	<p>Refer to the MSDS sheet before use.</p> <p>Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.</p>
<p>The systems listed above are representative of the product's use. Other systems may be appropriate.</p>	



**Industrial  
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Marine  
Coatings**

# 4.48A

## RECOATABLE EPOXY PRIMER LOW VOC

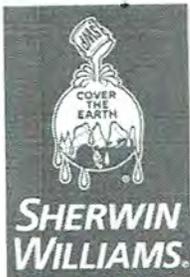
PART G      B67-45  
PART H      B67V45

SERIES  
HARDENER

### APPLICATION BULLETIN

8/06

SURFACE PREPARATION	APPLICATION CONDITIONS
<p>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.</p> <p><b>Iron &amp; Steel (atmospheric service)</b> Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Prime any bare steel the same day as it is cleaned.</p> <p><b>Galvanized Steel</b> 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/NACE 4 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.</p> <p><b>Previously Painted Surfaces</b> If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.</p>	<p>Temperature: air and surface:      35°F minimum, 140°F maximum material:              50°F minimum                                  At least 5°F above dew point</p> <p>Relative humidity:      85% maximum</p>
	APPLICATION EQUIPMENT
	<p>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.</p> <p><b>Reducer</b> ..... R7K111</p> <p><b>Clean Up</b> ..... R7K111 or Reducer #54 (R7K54)</p> <p><b>Airless Spray</b> Pressure ..... 2400 psi Hose ..... 1/4" ID Tip ..... .017" - .021" Filter ..... 60 mesh Reduction ..... As needed up to 5% by volume</p> <p><b>Conventional Spray</b> Gun ..... Binks Fluid Nozzle ..... 66 Air Nozzle ..... 63PB Atomization Pressure .. 50 psi Fluid Pressure ..... 12-20 psi Reduction ..... As needed up to 5% by volume</p> <p><b>Brush</b> Brush ..... Natural Bristle Reduction ..... Not recommended</p> <p><b>Roller</b> Cover ..... 3/8" - 1/2" woven with phenolic core Reduction ..... Not recommended</p> <p>If specific application equipment is listed above, equivalent equipment may be substituted.</p>



**Industrial  
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Marine  
Coatings**

# 4.48A

## RECOATABLE EPOXY PRIMER LOW VOC

**PART G      B67-45  
PART H      B67V45**

**SERIES  
HARDENER**

### APPLICATION BULLETIN

APPLICATION PROCEDURES	PERFORMANCE TIPS
<p>Surface preparation must be completed as indicated.</p> <p>Mix contents of each component thoroughly with power agitation. Make certain no pigment remains on the bottom of the cans. Then combine one part by volume of Part G with one part by volume of Part H. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated. Re-stir before using.</p> <p>If reducer solvent is used, add only after both components have been thoroughly mixed, after sweat-in.</p> <p>Apply paint at the recommended film thickness and spreading rate as indicated below:</p> <p><b>Recommended Spreading Rate per gal:</b>  Wet mils:            6.0 - 9.0  Dry mils:            4.0 - 6.0  Coverage:           175 - 260 sq ft/gal approximate</p> <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 6.0 mils wet @ 50% RH: @ 77°F</b>  To touch:            15 minutes  Tack free:           30 minutes  To recoat:      minimum:        2 hours      maximum:        1 year  To cure:             14 days</p> <p>If maximum recoat time is exceeded, abrade surface before recoating.</p> <p>Drying time is temperature, humidity, and film thickness dependent.</p> <p><b>Pot Life:</b>                    5 hours</p> <p><b>Sweat-in-Time:</b>            30 minutes</p> <p>Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.</p>	<p>Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.</p> <p>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.</p> <p>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.</p> <p>Excessive reduction of material can affect film build, appearance, and adhesion.</p> <p>Do not apply the material beyond recommended pot life.</p> <p>Do not mix previously catalyzed material with new.</p> <p>In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with R7K111 or Reducer #54 (R7K54).</p> <p>Material must be at least 50°F prior to catalyzing.</p> <p>Refer to Product Information sheet for additional performance characteristics and properties.</p>
CLEAN UP INSTRUCTIONS	SAFETY PRECAUTIONS
<p>Clean spills and spatters immediately with R7K111 or Reducer #54 (R7K54). Clean tools immediately after use with R7K111 or Reducer #54 (R7K54). Follow manufacturer's safety recommendations when using any solvent.</p>	<p>Refer to the MSDS sheet before use.</p> <p>Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.</p>
DISCLAIMER	WARRANTY
<p>The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.</p>	<p>The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.</p>



**Industrial  
&  
Marine  
Coatings**

# HI-SOLIDS POLYURETHANE

PART S B65-300  
PART S B65-350  
PART T B60V30

GLOSS SERIES  
SEMI-GLOSS SERIES  
HARDENER

## PRODUCT INFORMATION

Revised 6/05

PRODUCT DESCRIPTION	RECOMMENDED USES																																										
<p><b>HI-SOLIDS POLYURETHANE</b> is a two-component, low VOC, aliphatic, acrylic polyurethane resin coating. It is designed for high performance protection with outstanding exterior gloss and color retention.</p> <ul style="list-style-type: none"> <li>• Good/excellent resistance to corrosion and weathering</li> <li>• Outstanding color and gloss retention</li> <li>• Chemical resistant</li> <li>• Part of a system tested for nuclear irradiation and decontamination, Level II</li> <li>• Suitable for use in USDA inspected facilities</li> </ul>	<p>For use over prepared substrates in industrial environments</p> <ul style="list-style-type: none"> <li>• Heavy duty interior and exterior structural coating</li> <li>• A chemical and abrasion resistant equipment and machinery finish</li> <li>• A gloss and color retentive heavy duty maintenance coating for use in "high visibility" areas</li> <li>• Exterior surfaces of steel tanks</li> <li>• Chemical processing equipment</li> <li>• Exterior metal siding and trim</li> <li>• Marine Applications</li> <li>• Oil Field Machinery</li> <li>• Suitable for use in USDA inspected facilities</li> </ul> <p>Conforms to AWWA D102-03 OCS #5 &amp; #6. Acceptable for use in high performance architectural applications.</p>																																										
PRODUCT CHARACTERISTICS	PERFORMANCE CHARACTERISTICS																																										
<p><b>Finish:</b> High Gloss or Semi-Gloss</p> <p><b>Color:</b> Wide range of colors possible</p> <p><b>Volume Solids:</b> 65% ± 2%, mixed, may vary by color</p> <p><b>Weight Solids:</b> 77% ± 2%, mixed, may vary by color</p> <p><b>VOC (EPA Method 24):</b> Unreduced: &lt;340g/L; 2.80 lb/gal mixed Reduced 15% &lt;370 g/L; 3.08 lb/gal May vary by color</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>4.5 - 6.0</td> </tr> <tr> <td>Dry mils:</td> <td>3.0 - 4.0</td> </tr> <tr> <td>Coverage:</td> <td>260 - 347 sq ft/gal approximate</td> </tr> </table> <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 @ 4.5 mils wet @ 50% RH:</b></p> <table border="0"> <thead> <tr> <th></th> <th>@ 40°F</th> <th>@ 77°F</th> <th>@ 120°F</th> </tr> </thead> <tbody> <tr> <td>To touch:</td> <td>4 hours</td> <td>2 hours</td> <td>1 hour</td> </tr> <tr> <td>To handle:</td> <td>16 hours</td> <td>8 hours</td> <td>5 hours</td> </tr> <tr> <td>To recoat:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>  minimum:</td> <td>24 hours</td> <td>18 hours</td> <td>10 hours</td> </tr> <tr> <td>  maximum:</td> <td>14 days</td> <td>14 days</td> <td>14 days</td> </tr> <tr> <td>To cure:</td> <td>14 days</td> <td>10 days</td> <td>7 days</td> </tr> <tr> <td><b>Pot Life:</b></td> <td>8 hours</td> <td>4 hours</td> <td>2 hours</td> </tr> </tbody> </table> <p>If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.</p> <p><b>Sweat-in-Time:</b> None required</p> <p><b>Shelf Life:</b> Part S 36 months, unopened Part T 24 months, unopened Store indoors at 40°F at 100°F</p> <p><b>Flash Point:</b> 80°F, PMCC, mixed</p> <p><b>Reducer/Clean Up:</b></p> <table border="0"> <tr> <td>Below 80°F:</td> <td>Reducer #69, R7K69</td> </tr> <tr> <td>Above 80°F:</td> <td>Reducer #58, R7K58 or R6K32</td> </tr> </table>	Wet mils:	4.5 - 6.0	Dry mils:	3.0 - 4.0	Coverage:	260 - 347 sq ft/gal approximate		@ 40°F	@ 77°F	@ 120°F	To touch:	4 hours	2 hours	1 hour	To handle:	16 hours	8 hours	5 hours	To recoat:				minimum:	24 hours	18 hours	10 hours	maximum:	14 days	14 days	14 days	To cure:	14 days	10 days	7 days	<b>Pot Life:</b>	8 hours	4 hours	2 hours	Below 80°F:	Reducer #69, R7K69	Above 80°F:	Reducer #58, R7K58 or R6K32	<p><b>System Tested:</b> (unless otherwise indicated) Substrate: Steel Surface Preparation: SSPC-SP6 1 ct. Recoatable Epoxy Primer @ 4.0 mils dft 1 ct. Hi-Solids Polyurethane Gloss @ 3.0 mils dft</p> <p><b>Abrasion Resistance:</b> Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load Result: 87.1 mg loss</p> <p><b>Adhesion:</b> Method: ASTM D4541 Result: 1050 psi</p> <p><b>Corrosion Weathering:</b> Primer - Zinc Clad II Plus; Intermediate - Recoatable Epoxy Primer Method: ASTM D5894, 21 cycles, 7,056 hours Result: Rating 10 per ASTM D714 for blistering Rating 9 per ASTM D610 for rusting</p> <p><b>Direct Impact Resistance:</b> Method: ASTM D2794 Result: &gt;28 in. lbs.</p> <p><b>Dry Heat Resistance:</b> Method: ASTM D2485 Result: 200°F</p> <p><b>Flexibility:</b> Method: ASTM D522, 180° bend, 1/8" mandrel Result: Passes</p> <p><b>Moisture Condensation Resistance:</b> Method: ASTM D4585, 100°F, 1000 hours Result: No rusting, blistering, or delamination</p> <p><b>Pencil Hardness:</b> Method: ASTM D3363 Result: F</p> <p><b>Salt Fog Resistance:</b> Primer - Zinc Clad II Plus; Intermediate - Recoatable Epoxy Primer Method: ASTM B117, 9,000 hours Result: Rating 10 per ASTM D714 for blistering Rating 9 per ASTM D610 for rusting</p> <p><b>Thermal Shock:</b> Method: ASTM D2246, 15 cycles Result: Excellent</p> <p><b>Meets the requirements of SSPC Paint No. 36, Level 3.</b></p>
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**5.21**

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PART S B65-300  
PART S B65-350  
PART T B60V30

GLOSS SERIES  
SEMI-GLOSS SERIES  
HARDENER

## PRODUCT INFORMATION

RECOMMENDED SYSTEMS	SURFACE PREPARATION
<p><b>Steel: Epoxy Primer</b> 1 ct. Recoatable Epoxy Primer @ 4.0 - 6.0 mils dft 1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p><b>Steel: Epoxy Primer</b> 1 ct. Dura-Plate 235 @ 4.0 - 8.0 mils dft 1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p><b>Steel: Zinc Rich Primer</b> 1 ct. Zinc Clad II Plus @ 3.0 - 5.0 mils dft 1 ct. Macropoxy 646 @ 5.0 - 10.0 mils dft 1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p><b>Steel: Epoxy Mastik Primer</b> 1 ct. Macropoxy 646 @ 5.0 - 10.0 mils dft 1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p><b>Steel: Universal Primer</b> 1 ct. Kem Bond HS Metal @ 2.0 - 5.0 mils dft 1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p><b>Aluminum:</b> 1 ct. DTM Wash Primer @ 0.7 - 1.3 mil dft 1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p><b>Concrete:</b> 1 ct. Kem Cati-Coat Epoxy HS Filler/Sealer @ 10.0 - 15.0 mils dft 1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p><b>Galvanized Metal:</b> 1 ct. Recoatable Epoxy Primer @ 4.0 - 6.0 mils dft 1-2 cts. Hi-Solids Polyurethane @ 3.0 - 4.0 mils dft/ct</p> <p>The systems listed above are representative of the product's use. Other systems may be appropriate.</p>	<p>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.</p> <p>Refer to product Application Bulletin for detailed surface preparation information.</p> <p>Minimum recommended surface preparation: * Iron &amp; Steel: SSPC-SP6/NACE 3, 2 mil profile * Aluminum: SSPC-SP1 * Galvanizing: SSPC-SP1 * Concrete &amp; Masonry: SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3</p> <p>* Primer Required</p> <p style="text-align: center;"><b>TINTING</b></p> <p>Tint with 844 Colorants only into Part S. Extra White tints at 200% tint strength. Ultradeep tints at 150% tint strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.</p> <p style="text-align: center;"><b>APPLICATION CONDITIONS</b></p> <p>Temperature: 40°F minimum, 120°F maximum (air, surface, and material) At least 5°F above dew point</p> <p>Relative humidity: 85% maximum</p> <p>Refer to product Application Bulletin for detailed application information.</p> <p style="text-align: center;"><b>ORDERING INFORMATION</b></p> <p>Packaging: Part S: 1 gallon and 4 gallon kits Part T: quarts and gallons</p> <p>Weight per gallon: 10.7 ± 0.2 lb mixed, may vary with color</p> <p style="text-align: center;"><b>SAFETY PRECAUTIONS</b></p> <p>Refer to the MSDS sheet before use.</p> <p>Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.</p>
<b>DISCLAIMER</b>	<b>WARRANTY</b>
<p>The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.</p>	<p>The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.</p>



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**APPLICATION BULLETIN**

Revised 6/05

**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/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). 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. Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning 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**

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3. 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 VOC regulations and compatible with existing environmental and application conditions.

**Reducer/Clean Up**

Below 80°F ..... Reducer #69, R7K69  
Above 80°F ..... Reducer #58, R7K58 or R6K32

**Airless Spray**

Pressure ..... 2500 - 2800 psi  
Hose ..... 3/8" ID  
Tip ..... .013" - .017"  
Filter ..... none  
Reduction ..... As needed up to 10% by volume

**Conventional Spray**

Gun ..... Binks 95  
Fluid Nozzle ..... 63 B  
Atomization Pressure .. 50 - 70 psi  
Fluid Pressure ..... 20 - 25 psi  
Reduction ..... As needed up to 15% by volume

**Brush**

Brush ..... Natural bristle  
Reduction ..... As needed up to 15% by volume

**Roller**

Cover ..... 3/8" woven with phenolic core  
Reduction ..... as needed up to 15% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.



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**APPLICATION BULLETIN**

APPLICATION PROCEDURES	PERFORMANCE TIPS																																
<p>Surface preparation must be completed as indicated.</p> <p>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 S with 1 part by volume of Part T. Thoroughly agitate the mixture with power agitation.</p> <p>If reducer solvent is used, add only after both components have been thoroughly mixed.</p> <p>Apply paint at the recommended film thickness and spreading rate as indicated below:</p> <p><b>Recommended Spreading Rate per coat:</b> Wet mils: 4.5 - 6.0 Dry mils: 3.0 - 4.0 Coverage: 260 - 347 sq ft/gal approximate</p> <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 @ 4.5 mils wet @ 50% RH:</b></p> <table border="0"> <tr> <td></td> <td><b>@ 40°F</b></td> <td><b>@ 77°F</b></td> <td><b>@ 120°F</b></td> </tr> <tr> <td>To touch:</td> <td>4 hours</td> <td>2 hours</td> <td>1 hour</td> </tr> <tr> <td>To handle:</td> <td>16 hours</td> <td>8 hours</td> <td>5 hours</td> </tr> <tr> <td>To recoat:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    minimum:</td> <td>24 hours</td> <td>18 hours</td> <td>10 hours</td> </tr> <tr> <td>    maximum:</td> <td>14 days</td> <td>14 days</td> <td>14 days</td> </tr> <tr> <td>To cure:</td> <td>14 days</td> <td>10 days</td> <td>7 days</td> </tr> <tr> <td><b>Pot Life:</b></td> <td>8 hours</td> <td>4 hours</td> <td>2 hours</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>Sweat-in-Time:</b> None required</p> <p>Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.</p>		<b>@ 40°F</b>	<b>@ 77°F</b>	<b>@ 120°F</b>	To touch:	4 hours	2 hours	1 hour	To handle:	16 hours	8 hours	5 hours	To recoat:				minimum:	24 hours	18 hours	10 hours	maximum:	14 days	14 days	14 days	To cure:	14 days	10 days	7 days	<b>Pot Life:</b>	8 hours	4 hours	2 hours	<p>Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.</p> <p>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.</p> <p>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.</p> <p>Excessive reduction of material can affect film build, appearance, and adhesion.</p> <p>Do not apply the material beyond recommended pot life.</p> <p>Do not mix previously catalyzed material with new.</p> <p>In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #58, R7K58.</p> <p>Mixed coating is sensitive to water. Use water traps in all air lines. Moisture contact can reduce pot life and affect gloss and color.</p> <p>Quick-Thane Urethane Accelerator is acceptable for use. See data page 5.97 for details.</p> <p>E-Z Roll Urethane Defoamer is acceptable for use. See data page 5.99 for details.</p> <p>Refer to Product Information sheet for additional performance characteristics and properties.</p>
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# **Material Safety Data Sheets**

MATERIAL SAFETY DATA SHEET

B71W111  
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Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER	DATE OF PREPARATION	HMIS CODES	
B71W111	17-DEC-07	Health	3*
		Flammability	0
		Reactivity	0

PRODUCT NAME  
PRO INDUSTRIAL™ Hi-Bild Waterbased Catalyzed Epoxy (Part A), Extra White / Tint Base

MANUFACTURER'S NAME  
THE SHERWIN-WILLIAMS COMPANY  
101 Prospect Avenue N.W.  
Cleveland, OH 44115

TELEPHONE NUMBERS and WEBSITES  
Product Information

[www.sherwin-williams.com](http://www.sherwin-williams.com)

Regulatory Information

(216) 566-2902

[www.paintdocs.com](http://www.paintdocs.com)

Medical Emergency

(216) 566-2917

Transportation Emergency

(800) 424-9300

for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS	VAPOR PRESSURE
0.3	100-41-4	Ethylbenzene		
		ACGIH TLV	100 ppm	7.1 mm
		ACGIH TLV	125 ppm STEL	
		OSHA PEL	100 ppm	
		OSHA PEL	125 ppm STEL	
1	1330-20-7	Xylene		
		ACGIH TLV	100 ppm	5.9 mm
		ACGIH TLV	150 ppm STEL	
		OSHA PEL	100 ppm	
		OSHA PEL	150 ppm STEL	
2	123-42-2	Diacetone Alcohol		
		ACGIH TLV	50 ppm	1.2 mm
		OSHA PEL	50 ppm	
4	2807-30-9	2-Propoxyethanol		
		ACGIH TLV	Not Available	1.3 mm
		OSHA PEL	Not Available	
2	121-44-8	Triethylamine		
		ACGIH TLV	1 ppm (Skin)	54 mm
		ACGIH TLV	3 ppm (Skin) STEL	
		OSHA PEL	25 ppm (Skin)	
		OSHA PEL	100 ppm (Skin) STEL	
2	112926-00-8	Amorphous Precipitated Silica		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	6 mg/m3 as Dust	

Continued on page 2

16	13463-67-7	Titanium Dioxide		
		ACGIH TLV	10	mg/m3 as Dust
		OSHA PEL	10	mg/m3 Total Dust
		OSHA PEL	5	mg/m3 Respirable Fraction

---

### Section 3 -- HAZARDS IDENTIFICATION

---

#### ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

#### EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary and reproductive systems.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

#### CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

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### Section 4 -- FIRST AID MEASURES

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EYES: Flush eyes with large amounts of water for 15 minutes.  
Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.  
Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing.  
Keep warm and quiet.

INGESTION: Do not induce vomiting.  
Get medical attention immediately.

---

### Section 5 -- FIRE FIGHTING MEASURES

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FLASH POINT	LEL	UEL
Not Applicable	N.A.	N.A.

FLAMMABILITY CLASSIFICATION  
Not Applicable

#### EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Alcohol Foam

#### UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

Continued on page 3

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**SPECIAL FIRE FIGHTING PROCEDURES**

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

---

**Section 6 -- ACCIDENTAL RELEASE MEASURES**

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**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Remove all sources of ignition. Ventilate the area.  
Remove with inert absorbent.

---

**Section 7 -- HANDLING AND STORAGE**

---

**STORAGE CATEGORY**

Not Applicable

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

---

**Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**PRECAUTIONS TO BE TAKEN IN USE**

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist. Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m<sup>3</sup> (total dust), 3 mg/m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable fraction).

**VENTILATION**

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

**RESPIRATORY PROTECTION**

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

**PROTECTIVE GLOVES**

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

**EYE PROTECTION**

Wear safety spectacles with unperforated sideshields.

**OTHER PRECAUTIONS**

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Continued on page 4

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 Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES
 

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PRODUCT WEIGHT	10.66 lb/gal	1277 g/l
SPECIFIC GRAVITY	1.28	
BOILING POINT	185 - 342 F	85 - 172 C
MELTING POINT	Not Available	
VOLATILE VOLUME	57 %	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
pH	8.5	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
1.79 lb/gal	215 g/l	Less Water and Federally Exempt Solvents
1.01 lb/gal	122 g/l	Emitted VOC

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 Section 10 -- STABILITY AND REACTIVITY
 

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STABILITY -- Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

 Will not occur
 

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 Section 11 -- TOXICOLOGICAL INFORMATION
 

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CHRONIC HEALTH HAZARDS

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

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 TOXICOLOGY DATA
 

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Continued on page 5

CAS No.	Ingredient Name				
100-41-4	Ethylbenzene	LC50	RAT	4HR	Not Available
		LD50	RAT		3500 mg/kg
1330-20-7	Xylene	LC50	RAT	4HR	5000 ppm
		LD50	RAT		4300 mg/kg
123-42-2	Diacetone Alcohol	LC50	RAT	4HR	Not Available
		LD50	RAT		4000. mg/kg
2807-30-9	2-Propoxyethanol	LC50	RAT	4HR	Not Available
		LD50	RAT		3090 mg/kg
121-44-8	Triethylamine	LC50	RAT	4HR	Not Available
		LD50	RAT		460 mg/kg
112926-00-8	Amorphous Precipitated Silica	LC50	RAT	4HR	Not Available
		LD50	RAT		4999. mg/kg
13463-67-7	Titanium Dioxide	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available

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Section 12 -- ECOLOGICAL INFORMATION

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## ECOTOXICOLOGICAL INFORMATION

No data available.

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Section 13 -- DISPOSAL CONSIDERATIONS

---

## WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

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Section 14 -- TRANSPORT INFORMATION

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## US Ground (DOT)

Not Regulated for Transportation.

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities  
Xylenes (isomers and mixture) 100 lb RQ

## Canada (TDG)

Not Regulated for Transportation.

## IMO

Not Regulated for Transportation.

Continued on page 6

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Section 15 -- REGULATORY INFORMATION

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## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	0.2	
1330-20-7	Xylene	1	
121-44-8	Triethylamine	2	
	Glycol Ethers	4	

## CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

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Section 16 -- OTHER INFORMATION

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This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B67W45  
02 00

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER	DATE OF PREPARATION	HMIS CODES	
B67W45	29-FEB-08	Health	3*
		Flammability	3
		Reactivity	0

PRODUCT NAME  
Recoatable Epoxy Primer - Low VOC (Part G), White

MANUFACTURER'S NAME  
THE SHERWIN-WILLIAMS COMPANY  
101 Prospect Avenue N.W.  
Cleveland, OH 44115

TELEPHONE NUMBERS and WEBSITES  
Product Information

[www.sherwin-williams.com](http://www.sherwin-williams.com)

Regulatory Information  
(216) 566-2902

[www.paintdocs.com](http://www.paintdocs.com)

Medical Emergency  
(216) 566-2917

Transportation Emergency  
(800) 424-9300

for Chemical Emergency ONLY (spill, leak,  
fire, exposure, or accident)

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS	VAPOR PRESSURE
0.6	100-41-4	Ethylbenzene		
		ACGIH TLV	100 ppm	7.1 mm
		ACGIH TLV	125 ppm STEL	
		OSHA PEL	100 ppm	
		OSHA PEL	125 ppm STEL	
3	1330-20-7	Xylene		
		ACGIH TLV	100 ppm	5.9 mm
		ACGIH TLV	150 ppm STEL	
		OSHA PEL	100 ppm	
		OSHA PEL	150 ppm STEL	
19	98-56-6	p-Chlorobenzotrifluoride		
		ACGIH TLV	Not Available	5.3 mm
		OSHA PEL	Not Available	
1	67-64-1	Acetone		
		ACGIH TLV	500 ppm	180 mm
		ACGIH TLV	750 ppm STEL	
		OSHA PEL	1000 ppm	
1	90-72-2	Tri(dimethylaminomethyl)phenol		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	
7	Proprietary	Polyamide		
		ACGIH TLV	Not Available	
		OSHA PEL	Not Available	

Continued on page 2

42	14808-60-7	Quartz	ACGIH TLV	0.025	mg/m3	as Resp. Dust
			OSHA PEL	0.1	mg/m3	as Resp. Dust
13	13463-67-7	Titanium Dioxide	ACGIH TLV	10	mg/m3	as Dust
			OSHA PEL	10	mg/m3	Total Dust
			OSHA PEL	5	mg/m3	Respirable Fraction
1	1314-13-2	Zinc Oxide	ACGIH TLV	10	mg/m3	as Dust
			OSHA PEL	10	mg/m3	Total Dust
			OSHA PEL	5	mg/m3	Respirable Fraction

---

### Section 3 -- HAZARDS IDENTIFICATION

---

#### ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

#### EFFECTS OF OVEREXPOSURE

EYES: Causes burns.

SKIN: Causes burns.

INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary and reproductive systems.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic skin reaction in susceptible persons or skin sensitization.

#### CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

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### Section 4 -- FIRST AID MEASURES

---

EYES: Flush eyes with large amounts of water for 15 minutes.  
Get medical attention IMMEDIATELY.

SKIN: Wash affected area thoroughly with soap and water.  
If irritation persists or occurs later, get medical attention.

Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing.  
Keep warm and quiet.

INGESTION: Do not induce vomiting.  
Get medical attention immediately.

Continued on page 3

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**Section 5 -- FIRE FIGHTING MEASURES**

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FLASH POINT  
80 F PMCC

LEL	UEL
0.9	12.8

**FLAMMABILITY CLASSIFICATION**

RED LABEL -- Flammable, Flash below 100 F (38 C)

**EXTINGUISHING MEDIA**

Carbon Dioxide, Dry Chemical, Foam

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

**SPECIAL FIRE FIGHTING PROCEDURES**

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

---

**Section 6 -- ACCIDENTAL RELEASE MEASURES**

---

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

---

**Section 7 -- HANDLING AND STORAGE**

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**STORAGE CATEGORY**

DOL Storage Class IC

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

---

**Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**PRECAUTIONS TO BE TAKEN IN USE**

Use only with adequate ventilation.

Do not get in eyes or on skin. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m<sup>3</sup> (total dust), 3 mg/m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable fraction).

Continued on page 4

**VENTILATION**

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

**RESPIRATORY PROTECTION**

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

**PROTECTIVE GLOVES**

To prevent skin contact, wear gloves which are recommended by glove supplier for protection against materials in Section 2.

**EYE PROTECTION**

To prevent eye contact, wear safety spectacles with unperforated sideshields.

**OTHER PROTECTIVE EQUIPMENT**

Use barrier cream on exposed skin.

**OTHER PRECAUTIONS**

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

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**Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES**


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PRODUCT WEIGHT	15.34 lb/gal	1837 g/l
SPECIFIC GRAVITY	1.85	
BOILING POINT	132 - 292 F	55 - 144 C
MELTING POINT	Not Available	
VOLATILE VOLUME	36 %	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
0.82 lb/gal	98 g/l	Less Water and Federally Exempt Solvents
0.58 lb/gal	70 g/l	Emitted VOC

---

**Section 10 -- STABILITY AND REACTIVITY**


---

**STABILITY -- Stable**  
**CONDITIONS TO AVOID**

None known.

**INCOMPATIBILITY**

None known.

**HAZARDOUS DECOMPOSITION PRODUCTS**

By fire: Carbon Dioxide, Carbon Monoxide

**HAZARDOUS POLYMERIZATION**

Will not occur

Continued on page 5

## Section 11 -- TOXICOLOGICAL INFORMATION

## CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

## TOXICOLOGY DATA

CAS No.	Ingredient Name				
100-41-4	Ethylbenzene	LC50	RAT	4HR	Not Available
		LD50	RAT		3500 mg/kg
1330-20-7	Xylene	LC50	RAT	4HR	5000 ppm
		LD50	RAT		4300 mg/kg
98-56-6	p-Chlorobenzotrifluoride	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
67-64-1	Acetone	LC50	RAT	4HR	Not Available
		LD50	RAT		5800 mg/kg
90-72-2	Tri(dimethylaminomethyl)phenol	LC50	RAT	4HR	Not Available
		LD50	RAT		1653 mg/kg
Proprietary	Polyamide	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
14808-60-7	Quartz	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
13463-67-7	Titanium Dioxide	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
1314-13-2	Zinc Oxide	LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available

Continued on page 6

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 Section 12 -- ECOLOGICAL INFORMATION
 

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## ECOTOXICOLOGICAL INFORMATION

No data available.

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 Section 13 -- DISPOSAL CONSIDERATIONS
 

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## WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

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 Section 14 -- TRANSPORT INFORMATION
 

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## US Ground (DOT)

1 Gallon and Less may be Classed as CONSUMER COMMODITY, ORM-D  
 Larger Containers are Regulated as:  
 UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities  
 Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):  
 RQ, UN1263, PAINT, 3, PG III, (XYLENES (ISOMERS AND MIXTURE)),  
 (ERG#128)

## Canada (TDG)

UN1263, PAINT, CLASS 3, PG III, LIMITED QUANTITY, (ERG#128)

## IMO

UN1263, PAINT, CLASS 3, PG III, (27 C c.c.), EmS F-E, S-E

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 Section 15 -- REGULATORY INFORMATION
 

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## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	0.5	
1330-20-7	Xylene	3	
	Zinc Compound	5	2.7

## CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

Continued on page 7

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Section 16 -- OTHER INFORMATION

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This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

B65W351  
08 00

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER	DATE OF PREPARATION	HMIS CODES
B65W351	29-FEB-08	Health 2* Flammability 2 Reactivity 0

PRODUCT NAME  
Hi-Solids Polyurethane - Semi-Gloss (Part S), Extra White/Tint Base

MANUFACTURER'S NAME  
THE SHERWIN-WILLIAMS COMPANY  
101 Prospect Avenue N.W.  
Cleveland, OH 44115

TELEPHONE NUMBERS and WEBSITES

Product Information [www.sherwin-williams.com](http://www.sherwin-williams.com)  
Regulatory Information (216) 566-2902 [www.paintdocs.com](http://www.paintdocs.com)  
Medical Emergency (216) 566-2917  
Transportation Emergency (800) 424-9300 for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS	VAPOR PRESSURE
0.1	100-41-4	Ethylbenzene		
		ACGIH TLV	100 ppm	7.1 mm
		ACGIH TLV	125 ppm STEL	
		OSHA PEL	100 ppm	
		OSHA PEL	125 ppm STEL	
2	108-10-1	Methyl Isobutyl Ketone		
		ACGIH TLV	50 ppm	16 mm
		ACGIH TLV	75 ppm STEL	
		OSHA PEL	50 ppm	
		OSHA PEL	75 ppm STEL	
14	110-43-0	Methyl n-Amyl Ketone		
		ACGIH TLV	50 ppm	3.855 mm
		OSHA PEL	100 ppm	
13	14808-50-7	Quartz		
		ACGIH TLV	0.025 mg/m3 as Resp. Dust	
		OSHA PEL	0.1 mg/m3 as Resp. Dust	
4	14807-96-6	Talc		
		ACGIH TLV	2 mg/m3 as Resp. Dust	
		OSHA PEL	2 mg/m3 as Resp. Dust	
31	13463-67-7	Titanium Dioxide		
		ACGIH TLV	10 mg/m3 as Dust	
		OSHA PEL	10 mg/m3 Total Dust	
		OSHA PEL	5 mg/m3 Respirable Fraction	

Continued on page 2

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Section 3 -- HAZARDS IDENTIFICATION

---

## ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

## EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver and urinary systems.

## SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic respiratory and/or skin reaction in susceptible persons or sensitization. This effect may be delayed several hours after exposure.

Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure.

## CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

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Section 4 -- FIRST AID MEASURES

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EYES: Flush eyes with large amounts of water for 15 minutes.  
Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.  
Remove contaminated clothing and launder before re-use.

INHALATION: If any breathing problems occur during use, LEAVE THE AREA and get fresh air. If problems remain or occur later, IMMEDIATELY get medical attention.

INGESTION: Do not induce vomiting.  
Get medical attention immediately.

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Section 5 -- FIRE FIGHTING MEASURES

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FLASH POINT	LEL	UEL
102 F PMCC	1.1	7.9

## FLAMMABILITY CLASSIFICATION

Combustible, Flash above 99 and below 200 F

## EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

Continued on page 3

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**SPECIAL FIRE FIGHTING PROCEDURES**

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

---

**Section 6 -- ACCIDENTAL RELEASE MEASURES**

---

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Remove all sources of ignition. Ventilate the area.  
Remove with inert absorbent.

---

**Section 7 -- HANDLING AND STORAGE**

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**STORAGE CATEGORY**

DOL Storage Class II

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

Contents are COMBUSTIBLE. Keep away from heat and open flame.  
Consult NFPA Code. Use approved Bonding and Grounding procedures.  
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

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**Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**PRECAUTIONS TO BE TAKEN IN USE**

NO PERSON SHOULD USE THIS PRODUCT, OR BE IN THE AREA WHERE IT IS BEING USED, IF THEY HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF THEY EVER HAD A REACTION TO ISOCYANATES.

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.  
Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m<sup>3</sup> (total dust), 3 mg/m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable fraction).

**VENTILATION**

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

**RESPIRATORY PROTECTION**

Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturer's directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

**PROTECTIVE GLOVES**

To prevent skin contact, wear gloves which are recommended by glove supplier for protection against materials in Section 2.

**EYE PROTECTION**

Wear safety spectacles with unperforated sideshields.

**OTHER PROTECTIVE EQUIPMENT**

Use barrier cream on exposed skin.

**OTHER PRECAUTIONS**

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

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**Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES**


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PRODUCT WEIGHT	12.63 lb/gal	1513 g/l
SPECIFIC GRAVITY	1.52	
BOILING POINT	237 - 308 F	113 - 153 C
MELTING POINT	Not Available	
VOLATILE VOLUME	33 %	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
2.23 lb/gal	268 g/l	Less Water and Federally Exempt Solvents
2.23 lb/gal	268 g/l	Emitted VOC

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**Section 10 -- STABILITY AND REACTIVITY**


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**STABILITY** -- Stable

**CONDITIONS TO AVOID**

None known.

**INCOMPATIBILITY**

None known.

**HAZARDOUS DECOMPOSITION PRODUCTS**

By fire: Carbon Dioxide, Carbon Monoxide

**HAZARDOUS POLYMERIZATION**

Will not occur

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## Section 11 -- TOXICOLOGICAL INFORMATION

## CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

## TOXICOLOGY DATA

CAS No.	Ingredient Name				
100-41-4	Ethylbenzene				
		LC50	RAT	4HR	Not Available
		LD50	RAT		3500 mg/kg
108-10-1	Methyl Isobutyl Ketone				
		LC50	RAT	4HR	Not Available
		LD50	RAT		2080 mg/kg
110-43-0	Methyl n-Amyl Ketone				
		LC50	RAT	4HR	Not Available
		LD50	RAT		1670 mg/kg
14808-60-7	Quartz				
		LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
14807-96-6	Talc				
		LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available
13463-67-7	Titanium Dioxide				
		LC50	RAT	4HR	Not Available
		LD50	RAT		Not Available

## Section 12 -- ECOLOGICAL INFORMATION

## ECOTOXICOLOGICAL INFORMATION

No data available.

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 Section 13 -- DISPOSAL CONSIDERATIONS
 

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## WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

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 Section 14 -- TRANSPORT INFORMATION
 

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## US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.  
UN1263, PAINT, 3, PG III, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities  
Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):  
UN1263, PAINT, COMBUSTIBLE LIQUID, PG III, (ERG#128)

## Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.  
UN1263, PAINT, CLASS 3, PG III, (ERG#128)

## IMO

UN1263, PAINT, CLASS 3, PG III, (39 C c.c.), EmS F-E, S-E

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 Section 15 -- REGULATORY INFORMATION
 

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## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
100-41-4	Ethylbenzene	0.1	
108-10-1	Methyl Isobutyl Ketone	2	

## CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

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 Section 16 -- OTHER INFORMATION
 

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This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.