

PART A GP3831A01  
PART B GP3831B01

CLEAR  
HARDENER

Revised: February 1, 2023

## PRODUCT INFORMATION

### PRODUCT DESCRIPTION

**RESUFLO MVB** is a two-part 100% solid epoxy moisture mitigation barrier. It is a moisture tolerant and VOC-Compliant product that limits alkalinity and the transmission of moisture through concrete slabs. Resuflo MVB features a rapid curing time for faster job completion. It allows the direct bond of most industrial coatings, floor leveling products and most adhesive systems. Resuflo MVB is a 1 to 1 mix ratio that simplifies the application.

12-Mil (0.30 mm) System: On concrete that is at least 28 days old: Withstands concrete moisture up to 85% in-situ relative humidity per ASTM F2170.

17-Mil (0.43 mm) System: On concrete that is at least 28 days old: Withstands concrete moisture up to 100% in-situ relative humidity per ASTM F2170.

22-Mil (0.56 mm) System: On concrete that is between 7 and less than 28 days old and cured enough to be properly prepped: Withstands concrete moisture up to 100% in-situ relative humidity per ASTM F2170.

Core testing per ASTM C856 (Petrographic Examination of Hardened Concrete) when RH is >95% is required for product warranty

#### Advantages:

- LEED® v4 - Indoor Air Quality credits available.
- Meets requirements per CDPH-CA Section 01350 Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental chambers Version 1.2.
- Fast cure
- Same day cover
- VOC-compliant
- Compatible with most floor covering systems
- One coat application
- Direct bond of floor coverings and toppings
- Resists imprinting
- 0.05 perm rating
- Superior bond to dry surfaces

### GENERAL INFORMATION

LIMITATIONS: WARRANTY WILL NOT APPLY.

1. Do not apply to new concrete slabs until at least 7 days old.
2. Colors CANNOT be used in Resuflo MVB.
3. Resuflo MVB is not a wear surface or topping, it must be topcoated.
4. Do not apply over a slab while experiencing hydraulic pressure.
5. Warranty will not apply to Resuflo MVB installed over concrete with ASR (Alkali Silica reaction).
6. MVER may fluctuate within slab areas and can have significant seasonal variations.
7. Do not apply over existing coatings, sealer or floor coverings.
8. Do not apply to concrete slabs with less than 3500 psi compressive strength. (Consult Sherwin-Williams Technical Services.)
9. Protect the area to be treated from strong sunlight, wind or drafts during application.
10. Acid etching and diamond grinding should not be used as a method of preparation.
11. Cannot be sprayed.
12. DO NOT FREEZE.

### ORDERING INFORMATION

#### Packaging:

Part A: 1 gallon (3.78L) containers, 5 gallon (18.9L) filled pails, 55 gallon (208L) filled drums  
Part B: 1 gallon (3.78L) containers, 5 gallon (18.9L) filled pails, 55 gallon (208L) filled drums

### PRODUCT CHARACTERISTICS

**Volume Solids:** 99.77%, mixed (ASTM D1475)  
**Weight Solids:** 99.81%, mixed (ASTM D1475)  
**Mix Ratio:** 1:1 by volume  
**VOC (EPA Method 24):** <100 g/L ; 0.83 lb/gal, mixed

#### Recommended Spreading Rate per coat:

|  | Minimum           | Maximum            |
|--|-------------------|--------------------|
| <b>Wet mils (microns)</b>                    | <b>12.0</b> (300) | <b>22.0</b> (550)  |
| <b>Coverage sq ft/gal (m<sup>2</sup>/L):</b> | <b>72</b> (6.69)  | <b>133</b> (12.36) |

#### Drying Schedule:

|                        | @ 65°F<br>(18°C)                           | @ 70°F<br>(21°C) | @ 75°F<br>(24°C) | @ 80°F<br>(27°C) | @ 90°F<br>(32°C) |
|------------------------|--|------------------|------------------|------------------|------------------|
| <b>Tack Free Time:</b> | 8 hours                                    | 6.5 hours        | 5 hours          | 4 hours          | 3 hours          |
| <b>Dry Hard:</b>       | 11 hours                                   | 9 hours          | 7 hours          | 6 hours          | 4 hours          |
| <b>To Recoat:</b>      | Maximum: up to 24 hours for all conditions |                  |                  |                  |                  |

**Shelf Life:** 24 months, unopened  
Store indoors at 65°F (18°C) to 90°F (32°C)

### PERFORMANCE CHARACTERISTICS

| Test Name   | Test Method | Results*                 |
|---|-------------|--------------------------|
| <b>Adhesion to Concrete</b>                             | ASTM D7234  | 350 psi (2.41 MPa)       |
| <b>Compressive Strength</b>                             | ASTM D695   | 11,880 psi (81.93 MPa)   |
| <b>Percent Elongation</b>                               | ASTM D2370  | 8%                       |
| <b>Shore D Hardness</b>                                 | ASTM D2240  | 90 @ 0 sec / 73 @ 15 sec |
| <b>Tensile Strength</b>                                 | ASTM D2370  | 9,100 psi (62.76 MPa)    |
| <b>Water Absorption (24-hour immersion, resin only)</b> | ASTM D570   | 1.17%                    |
| <b>Water Vapor Transmission (net perms)</b>             | ASTM E96    | 0.05 (17 mils)           |

\*Results are based on conditions at 70°F (21°C)

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## PRODUCT INFORMATION

### ***SURFACE PREPARATION***

**CHECK THE CONCRETE:** Concrete must be structurally sound. Concrete can be less than 28 days old.

**CHECK FOR MOISTURE:**

In-situ relative humidity testing per ASTM F2170 is required for warranty.

12-Mil System: Readings can be up to 85% relative internal concrete humidity.

17-Mil & 22-Mil Systems: Readings can be up to 100% relative internal concrete humidity.

Test methods can be purchased at [www.astm.org](http://www.astm.org) or follow instructions from the suppliers of this test.

The Warranty application at the end of this document must be completed and returned to Sherwin-Williams Coating Technologies within 60 days of the Resuflo MVB topcoat application.

**NOTE:** Although moisture testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination from oils, chemical spills or excessive salts.

**CORES:** Core testing per ASTM C856 (Petrographic Examination of Hardened Concrete) when RH is >95% is required for product warranty. For other conditions, Sherwin-Williams recommends core samples be taken and lab tested for penetration of the slab by any sealers, oils, adhesives, or other bond breakers. We do not warranty Alkali Silica Reaction or any of the other types of contamination listed above. Cores through slab can indicate absence or failure of moisture barrier or presence of aggregate between membrane and slab. Sherwin-Williams does not warrant penetration and bond where cores are not tested unless and until project owner submits cores and lab establishes that no impediment to bond and penetration was present.

**CHECK THE TEMPERATURE AND HUMIDITY:** The ambient and surface temperature must be between 60°F (15.6°C) and 90°F (32.2°C) at the time of application, and temperatures should not rise above this range during application or while the material is curing. Ambient relative humidity percentage should not exceed 80% at the time of application.

### ***APPLICATION EQUIPMENT***

- Protective clothing
- Respirator
- Jiffy mixer blade
- Film gauges
- Slow speed drill (500 rpm or less)
- Rubber squeegees (flat and 3/16" (4.78 mm) notched)
- Soccer Cleats (soft spikes) or spiked shoes (without sharp point)
- Roller assembly (18")
- Shed Resistant, Short Nap Rollers
- Tape

**ASSEMBLE EQUIPMENT:** Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

### ***PREPARATION***

**CONCRETE:** All surface must be clean, sound, solid, open pore and absorptive. Slab must be at least 4" thick and any distinct layer at least 2" thick to be considered structurally sound. Repair and leveling layers containing latex or other components generally prevent absorption and proper bond and should be removed. Surface must be shot blasted to achieve a surface profile of ICRI CSP 3-5 (Int. Concrete Repair Inst.) Grinding or acid etching is not permitted, nor chemical remediation of any adhesive residues.

**ENSURE POROSITY:** Surface must be clean, completely free of dust, dirt, paint, sealer or any contaminant which might interfere with penetration or bond. Do not apply to floors which have sealers or bond breakers applied unless completely removed. Quick tests to help determine clean, open and absorptive concrete uses water drops. This easy test is particularly important if cores were not pulled and tested. If dime size water drops placed at several locations on prepared floor do not readily absorb into concrete within 30 seconds or beads up, surface is not sufficiently absorptive. In all cases, thorough vacuuming (with dust containment filter) is needed before application. Cleaning with pressure washer may be advisable in some cases. Leveling should be done on top of Resuflo MVB with suitable repair materials.

**JOINTS:** Expansion (cold or construction) joints should be left intact. Resuflo MVB is not warranted against structural movement at expansion joints. To help reduce moisture emissions through expansion joints, coat the walls and bottom of the cleaned joint with Resuflo MVB. Once allowed to dry, an expansion joint cover or an elastomeric sealant may be used. For concrete slabs over 6 months old, sawcut (control) joints and cracks should be filled by pouring Resuflo MVB full depth or to ¾ of joint depth. If filling to ¾ depth pour silica quartz into Resuflo MVB to create a mortar. Sweep away excess sand and proceed with Resuflo MVB installation.

### ***APPLICATION INSTRUCTIONS***

**COVERAGE RATES:** Apply the balance of Resuflo MVB needed to achieve the desired total thickness. It is important that the coverage rates are consistent. Very rough or porous concrete may require a heavier application. Adjust the rate as needed.

One gallon (3.78 litres) of Resuflo MVB will cover:  
133 ft<sup>2</sup> (2.4 m<sup>2</sup>) @ 12 mils (0.30 mm) wet/dry film  
94 ft<sup>2</sup> (8.7 m<sup>2</sup>) @ 17 mils (0.43 mm) wet/dry film  
72 ft<sup>2</sup> (6.7 m<sup>2</sup>) @ 22 mils (0.56 mm) wet/dry film

**PART A.** For larger unit sizes, pour out 2 gallons (7.56 litres) Part A into a measuring container. Then, pour this measured Part A into a 5-gallon mixing pail.

**ADD RESUFLO MVB PART B TO PART A (1:1 VOLUME RATIO).** For larger unit sizes, pour out 2 gallons (7.56 litres) Part B into a measuring container that is separate from the one used with the Part A. Then, add the measured Part B to the Part A already in the mixing pail.

**MIX FOR 4 MINUTES** using a Jiffy mixer blade and slow-speed drill to produce a streak free, homogenous product. Care must be taken to mix all the product and avoid any action that might entrap air such as high-speed drill mixing. **DO NOT THIN** the product.

**APPROXIMATE WORK TIME (minutes) - °F (°C):**  
65 (18.3) 70 (21.1) 75 (23.9) 80 (26.7) 90 (32.2)  
45 32 20 16 12

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### APPLICATION INSTRUCTIONS (CONT'D)

IMMEDIATELY POUR ALL OF THE MIXED MATERIAL onto the floor in a single bead.

PUSH THE SQUEEGEE at an even speed and down pressure. The squeegee should be pushed to apply the targeted amount. NOTE: Use of a notched squeegee will make it easier to apply a thicker coat.

Immediately after the Resufloor MVB is applied and there is room to roll, a second person will BACKROLL THE MATERIAL with a short nap roller to a smooth and uniform appearance. NOTE: Finish backrolling as soon as possible.

#### APPLICATION OF OTHER COATINGS:

First, thoroughly check Resufloor MVB for any fisheyes or pinholes which would be a weak point in the membrane. Grind these areas and clean off residue. Make sure the surface is dry. Then, reapply Resufloor MVB to these areas.

#### APPROXIMATE CURE TIME (hours) - °F (°C):

65 (18.3) 70 (21.1) 75 (23.9) 80 (26.7) 90 (32.2)  
11 9 7 6 4

Sherwin-Williams epoxies bond to Resufloor MVB if coated within 24 hours. Resufloor MVB must be cured (hard) enough so spikes worn to apply epoxy or other recoat activities do not damage Resufloor MVB.

If you want to apply coatings other than Sherwin-Williams epoxies (polyaspartics and urethanes), it will require sanding with 120 grit paper. Because of this you will need to apply an additional 2 mils of Resufloor MVB, during the initial application. We recommend thorough sanding with a swing-type buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled. The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent and rinse with clean water before coating. Tack rag to remove fine dust if needed.

Since Resufloor MVB cannot be pigmented, we recommend 6-8 mils (0.15-0.20 mm) of tinted HPF epoxy to set the proper background color for a Sherwin-Williams urethane. (See appropriate product documentation for application instructions.) The exact thickness will vary depending on the hide/color of the system.

### MAINTENANCE

Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).

Care: Proper maintenance will increase the life and help maintain the appearance of your new HPF floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish.

Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.

Caution: Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface.

Do not drop heavy or pointed items on the floor as this may cause chipping or concrete popouts in the case of a weak cap.

Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass between the tire and the floor coating can prevent discoloration.

Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

Repair: Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

### TINTING

Do not tint.

### SAFETY

Refer to the SDS 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.

### DISCLAIMER

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.

### WARRANTY

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.