

# MAGNALUX™ 1500PF **NOVOLAC VINYL ESTER PUTTY - PIT FILLER & COVING MATERIAL**

PART A PART B

B88A150 DARK GRAY B88V92 MAGNALUX P2 (MEKP BLEND) **B88V86** MAGNALUX RED DYÉ

Revised: March 20, 2025

# PRODUCT INFORMATION

### **PRODUCT DESCRIPTION**

MAGNALUX 1500PF is a novolac vinyl ester putty, coving and pit filler material that is dark gray. It is used over welded and riveted seams to form chine coves and to smooth floor structures such as sumps, pipe support brackets, and floating roof leg support pads in conjunction with Magnalux novolac vinyl ester systems and laminating resins.

# **PRODUCT CHARACTERISTICS**

Low Sheen Finish:

Color: Dark Gray

**Volume Solids:** 100% ± 2% (mixed)

VOC: <100 g/L; 0.83 lb/gal, mixed

(EPA Method 24, D2369-10)

#### Mix Ratio:

Use premeasured Magnalux P2 (MEKP catalyst) at the rate of 100:1 per gallon of Part A. See Application Bulletin.

#### Recommended Spreading Rate per coat:

	Minimum	Maximum	
Wet mils (microns):	<b>25.0</b> (625)	<b>250.0</b> (12,500)	
Dry mils (microns):	<b>25.0</b> (625)	<b>250.0</b> (12,500)	

Lining is 100% reactive, however, practical coverage rate is based on 99.8 ± 2% volume solids.

Theoretical coverage sq ft/gal

(m<sup>2</sup>/L) @ 1 mil / 25 microns dft: 1604 (39.4)

Practical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft over a CSP 3:

1600 (39.3)

@ 50°F/10°C

Varies with system and application. See recommended systems.

# **Drying Schedule:**

@ 73°F/23°C

50% RH

@ 90°F/32°C

To touch:	6 hours	4 hours	2 hours			
To recoat*:						
minimum:	2 hours	1.5 hours	1 hour			
maximum:	50 hours	48 hours	44 hours			
To cure:	10 days	6 days	4 days			
*Strong sunlight (UV) will cause rapid cure and substantially reduce						
overcoating time. High ambient or substrate temperatures will as well. If						
uncertain, take a clean cloth saturated with acetone and rub the surface.						
Allow the acetone to evaporate or dry off the surface and immediately check						
surface for a tacky or sticky feel. If tacky or sticky it's within the recoat, if not						
then the coating surface will have to be abraded.						

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

Pot Life: 2 hours 1 hour 30 minutes Sweat-in-time: Not required

Shelf Life: 6 months, unopened Store indoors at 73°F (23°C). Flash Point: 88°F (31°C), PMCC, mixed Not recommended Reduction: Clean Up: MEK

### RECOMMENDED USES & LIMITATIONS

- Over riveted and welded joints
- Pit filling
- Bug hole filling
- To form chine coves in storage tanks
- For fairing and smoothing sharp angles to provide a smooth
- For smoothing floor structures such as support brackets and leg support pads
- For use over steel or concrete
- · Not suitable for immersion in some high polar solvents
- Maximum temperature for immersion service is 230°F (110°C)
- Maximum film thickness in one application is 250 mils (6250
- Maximum temperature for gaseous service is 320°F (160°C)

# PERFORMANCE CHARACTERISTICS

Consult your Sherwin-Williams representative for specific application, temperature, concentration, and exposure recommendations.

Test Name	Test Method	Results		
Abrasion Resistance	ASTM D4060, H18 wheel, 1000 cycle	180 mg		
Adhesion (to steel)	ASTM D4541	1,160 psi (8 Mpa)		
Barcol Hardness	BS EN 59:2016 AND ASTM D2583	38		
Cohesive Adhesive Strength	BS EN ISO 4624:2016 (Method C)	1,929 psi (13.3 Mpa)		
Compressive Strength	BS6319: Part 2: 1983	19,633 psi (135.4 Mpa)		
Direct Impact	ASTM D2794	48.7 in lbs (5.5J)		
Flexibility	BS2782: Part 10: Method 1005:1977 EN63	5,787psi (39.9 Mpa)		
Indirect Impact	ASTM D2794	31.0 in lbs (3.5J)		
Tensile Elongation	ASTM D638	0.48%		
Tensile Strength	ASTM D638	4,148 psi (28.6 Mpa)		
VOC Level	ASTM D2369-10	97.7% Solids, 2.83% VOC, 35.98% g/L		



# MAGNALUX<sup>TM</sup> 1500PF NOVOLAC VINYL ESTER PUTTY - PIT FILLER & COVING MATERIAL

PART A B88A150 DARK GRAY
PART B B88V92 MAGNALUX P2 (MEKP BLEND)
B88V86 MAGNALUX RED DYE

Revised: March 20, 2025

# **PRODUCT INFORMATION**

#### RECOMMENDED SYSTEMS

	Dry Film Thickness	
	<u>Mils</u>	(Microns)
Steel:		
1 ct. Magnalux 1100	2.0-4.0	(50-100)
1 ct. Magnalux 1500PF as needed u	ıp to 250.0	(6250)
1 ct. Magnalux 1200	40.0-45.0	(1000-1125)
1½ oz. glass mat		
1 ct. Multiple options* depending or	n	
service	20.0-30.0	(500-750)
1 ct. (optional) Magnalux 2500WX	8.0-16.0	(200-400)

<sup>\*</sup>Magnalux 2100FF, Magnalux 2200GF, or Magnalux 2300AR

#### Steel Pit Filler or Concrete Bug Hole:

1 ct.	Magnalux 1100 or 1200	2.0-4.0	(50-100)
1 ct.	Magnalux 1500PF as needed to fill		
	pits up to	250.0	(6250)
1-2 cts	Magnalux 2100FF, 2200GF, or		
	2300AR	20.0-35.0	(500-875)

NOTE: In the event of a serious soilside corrosion potential, a double layer of laminate is recommended, for a total thickness of 95-110 mils (2375-2750 microns). When applying a double laminate, the wax solution is only added into the final gel coat.

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

# SURFACE PREPARATION

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

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel

Immersion: SSPC-SP10/NACE 2, 2-3 mils

(50-75 microns) sharp and angular

profile [Medium (G) (ISO 8503-2)]

Concrete

Immersion\*: SSPC-SP13/NACE 6, or ICRI

No. 310.2R, CSP 4-6

\*Primer required

Surface Preparation Standards					
	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal Commercial Blast		Sa 2.5 Sa 2	Sa 2.5 Sa 2	SP 10 SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted Pitted & Rusted	C St 2 D St 2	C St 2 D St 2	SP 2 SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
Fower 1001 Cleaning	Pitted & Rusted	D St 3	D St 3	SP 3	-

### **TINTING**

Do not tint.

# **APPLICATION CONDITIONS**

Temperature: 50°F (10°C) minimum, 110°F (43°C)

maximum

(air, surface, material)

At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

# **ORDERING INFORMATION**

Packaging:

Part A: 1 gallon (3.78L) and 5 gallons (18.9L) Part B: 2.7 oz (80 mL) and 13.5 oz (400 mL)

filled bottles

Weight:  $12.4 \pm 0.2$  lb/gal; 1.5 Kg/L, mixed

#### SAFETY PRECAUTIONS

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

#### 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.

# 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.



# MAGNALUX™ 1500PF **NOVOLAC VINYL ESTER PUTTY - PIT FILLER & COVING MATERIAL**

PART A PART B B88A150

**DARK GRAY** B88V92 MAGNALUX P2 (MEKP BLEND)

**B88V86** 

MAGNALUX RED DYÉ

Revised: March 20, 2025

# **APPLICATION BULLETIN**

# SURFACE PREPARATIONS

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 (immersion service)

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2-3 mils / 50-75 microns). Remove all weld spatter and round all sharp edges. Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Prime all blast-cleaned surface with Magnalux 1100, applied at a dry film thickness of 2.0-4.0 mils (50-100 microns).

Note: Make sure there is no moisture on the substrate prior to application.

#### **Concrete and Masonry**

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 4-6. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). 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.

Primer required.

If surface deterioration presents an unacceptably rough surface, prime with Magnalux 1100. Magnalux 1500PF is recommended to patch and resurface damaged concrete. Fill all cracks, voids and bugholes with Magnalux 1500PF.

# Follow the standard methods listed below when applicable:

ASTM D4258 Standard Practice for Cleaning Concrete. ASTM D4259 Standard Practice for Abrading Concrete.

ASTM D4260 Standard Practice for Etching Concrete.

ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.

SSPC-SP 13/Nace 6 Surface Preparation of Concrete. ICRI No. 310.2R Concrete Surface Preparation.

# Concrete, Immersion Service:

For surface preparation, refer to SSPC-SP13/NACE 6, Section 4.3.1 or 1.3.2 or ICRI No. 310.2R, CSP 4-6.

Surface Preparation Standards					
	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal Near White Metal Commercial Blast		Sa 3 Sa 2.5 Sa 2	Sa 3 Sa 2.5 Sa 2	SP 5 SP 10 SP 6	1 2 3
Brush-Off Blast Hand Tool Cleaning	Rusted	Sa 1 C St 2	Sa 1 C St 2	SP 7 SP 2	4
Power Tool Cleaning	Pitted & Rusted Rusted Pitted & Rusted	D St 2 C St 3 D St 3	D St 2 C St 3 D St 3	SP 2 SP 3 SP 3	-

# **APPLICATION CONDITIONS**

50°F (10°C) minimum, 110°F (43°C) Temperature:

maximum

(air, surface, material)

At least 5°F (2.8°C) 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 compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reduction ......Not recommended

Clean-up .....MEK

### **Equipment:**

- Trowel
- Stiff Bristle Brush
- Putty Knife
- Squeegee
- · Other applicable tools

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



# MAGNALUX™ 1500PF **NOVOLAC VINYL ESTER PUTTY - PIT FILLER & COVING MATERIAL**

PART A PART B

To touch:

To recoat\*:

B88A150

DARK GRAY B88V92 MAGNALUX P2 (MEKP BLEND)

MAGNALUX RED DYÉ

Revised: March 20, 2025

# APPLICATION BULLETIN

# **APPLICATION PROCEDURES**

Surface preparation must be completed as indicated.

Mixing Instructions: Store in a temperature controlled environment, 50°F (10°C) to 80°F (26°C), and out of direct sunlight. Magnalux 1500PF can be catalyzed using Magnalux P2 MEKP pre-packaged blend within the following ratios: 100:1 PBW base to catalyst to 100:2 PBW base to catalyst. The ratio should always be with these limits, 2% addition of catalyst being the norm, 1% being used at ambient temperatures above 75°F (24°C) or where film thickness of Magnalux 1500PF will exceed 250 mils (6250 microns). Due to heavy viscosity it is recommended that you use a 3/4 inch drill with a double Helix Mixer Blade or Grout Mixer.

Weigh out only the proportion of material, which can be used with the pot life and place into a mixing container. Measure the correct proportion of catalyst for the base amount and carefully add this to the base using the suitable and clean implement. Mix thoroughly then add Magnalux Red Dye if required and mix to an even color. After stirring it is advisable to remove the contents from the mixing container into a shallow receptacle and remix.

It is important that you add and mix the Magnalux P2 MEKP prior to adding the Magnalux Red Dye. If done incorrectly you will affect the performance of the material.

DO NOT THIN. NO DILUENT OR THINNER MAY BE USED. The addition of styrene may adversely affect the chemical resistance of this product. Styrene should not be added without consulting a Sherwin-Williams Technical Service Representative first.

Application:

Application:
Apply thickened Magnalux 1500PF to chine and floor plate lap seams of welded and riveted tanks using a trowel or putty knife. Fill completely to provide a smooth transition from plate to plate or floor to shell. Fill welded chines to a 3 inch radius cover. Fill riveted chines as necessary to cove the rivet heads and form a smooth cove. It is helpful to use a pre-cut template to strike off excess putty and provide a uniform cross-section. Do not apply thicker than 250 mils (6250 microns) in a single application.

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

# Recommended Spreading Rate per coat:

Minimum Maximum Wet mils (microns): **25.0** (625) **250.0** (12,500) Dry mils (microns): **25.0** (625) **250.0** (12,500)

Lining is 100% reactive, however, practical coverage rate is based on 99.8 ± 2% volume solids

Theoretical coverage sq ft/gal

(m<sup>2</sup>/L) @ 1 mil / 25 microns dft:

1604 (39.4)

Practical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft over a CSP 3:

**1600** (39.3)

Varies with system and application. See recommended systems.

# CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with MEK. Clean tools immediately after use with MEK. Follow manufacturer's safety recommendations when using any solvent.

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# APPLICATION PROCEDURES (CONT'D)

#### **Drying Schedule:**

@ 50°F/10°C @ 73°F/23°C @ 90°F/32°C 50% RH 6 hours 4 hours 2 hours

minimum: 2 hours 1.5 hours 1 hour maximum: 50 hours 48 hours 44 hours 10 days 6 days To cure: 4 days

\*Strong sunlight (UV) will cause rapid cure and substantially reduce overcoating time. High ambient or substrate temperatures will as well. If uncertain, take a clean cloth saturated with acetone and rub the surface. Allow the acetone to evaporate or dry off the surface and immediately check surface for a tacky or sticky feel. If tacky or sticky it's within the recoat, if not then the coating surface will have to be abraded.

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

Pot Life: 2 hours 1 hour 30 minutes Sweat-in-time: Not required

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

#### Performance Tips

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. There is often a difference between the measured wet film thickness (WFT) and the true applied wet film thickness – this is due in part to inaccuracy in WFT measurement and flow and leveling characteristics.

When applying in direct sunlight it is important to test recoat prior to applying additional topcoats. Use the acetone rub test and check for a tacky feeling on the surface. If no tacky feeling, the surface will have to abraded prior to additional topcoats.

No reduction of material is recommended as it can affect film build, appearance, and adhesion.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

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

### SAFETY PRECAUTIONS

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#### WARRANTY

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