

# **Protective** Marine **Coatings**

## SHER-LOXANE® 800 TWO COMPONENT POLYSILOXANE

PART A B80-500 B80-550 PART A B80V500 Part B PART B B80V502

GLOSS SERIES **SEMI-GLOSS SERIES** STANDARD HARDENER **FAST CURE / LOW TEMP HARDENER** 

Revised: June 11, 2025

### PRODUCT INFORMATION

1401-1

#### **PRODUCT DESCRIPTION**

SHER-LOXANE 800 is a versatile, high performance, two component polysiloxane (epoxy siloxane hybrid) that combines the properties of both a high performance epoxy and a polyurethane.

- <100 g/L VOC, no isocyanates</li>
- 20°F (-5°C) cure

#### PRODUCT CHARACTERISTICS

Gloss and Semi-Gloss Finish:

Color: Wide range of colors available **Volume Solids:** 90.0% ± 3% mixed, may vary by color

VOC (EPA Method 24): <100 g/L; 0.77 lb/gal, mixed

Mix Ratio: 4:1 by volume

Recommended Spreading Rate per coat:				
Minimum Maximu				mum
Wet mils (microns)	5.0	(125)	7.0	(175)
Dry mils (microns)	4.0	(100)	6.0	(150)
~Coverage sq ft/gal (m²/L)	240	(6.0)	360	(9.0)
Theoretical coverage <b>sq ft/gal</b> (m²/L) @ 1 mil / 25 microns dft	1443	(35.4)		

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

#### <u>Drying Schedule @ 5.0 mils wet (125 microns):</u>

with Standard Hardener:

	@ 77°F/25°C	@ 100°F/40°C	@ 120°F/50°C	
	50% RH	50% RH	50% RH	
To touch:	3 hours	2.5 hours	2 hours	
To handle:	6 hours	5 hours	4 hours	
To recoat:				
minimum:	7 hours	6 hours	5 hours	
maximum:	1 year	1 year	1 year	
To cure:	7 days	4 days	3 days	
Pot Life*:	4 hours¹ 2 hours²	4 hours <sup>1</sup> 1.5 hours <sup>2</sup>	3 hours <sup>1</sup> 1.5 hours <sup>2</sup>	
Sweat-in-Time:	None Required	l		

Sweat-in-Time:	None Require	ed		
	with Fast 0 @ 20°F/-5°C 10% RH	Cure / Low Temp @ 50°F/10°C 40% RH	Hardener: @ 77°F/25°C 50% RH	
To touch:	12 hours	3 hours	1 hour	
To handle:	75 hours	7 hours¹ 6 hours²	2 hours	
To recoat:	0.4.1		4.1	
minimum:	24 hours	9 hours	4 hours	
maximum:	1 year	1 year	1 year	
To cure:	14 days	7 days	7 days	
If maximum recoat time is exceeded, abrade surface before recoating.				
Drying time is ten	perature, humid	ity, and film thickn	ess dependent.	

Pot Life\*: 4 hours

Sweat-in-Time: None Required

#### PRODUCT CHARACTERISTICS (CONT'D)

Part A, Gloss: 12 months, unopened Part A, Semi-Gloss: 24 months, unopened Part B: 36 months, unopened Shelf Life:

Store indoors at 40°F (4.5°C) to 100°F (38°C)

**Flash Point:** 

Standard: 145°F (63°C), PMCC or SETA, mixed Fast Cure: 154°F (68°C), PMCC or SETA, mixed MEK or Oxsol 100, up to 10% by volume Reducer: Clean Up\*\*: use Oxsol 100 or High Solids Compliant Thinner #1 - Fast

\*\*see Performance Tips section on last page for more information

#### RECOMMENDED USES

- Recommended for use on new construction, repair and field maintenance coating projects. It provides effective long-term corrosion control and weatherability.

- corrosion control and weatherability.
  Can be applied directly over inorganic zincs
  Can be used in immersion service Fresh/Raw, Salt, Tap/Non-PW water types ONLY (not intended to be used as a lining)
  Meets USDA requirement for incidental contact
  Two coats of Sher-Loxane 800 @ 120 microns (4.7 mils) dft per
  coat applied direct-to-metal is in full accordance with the
  requirements of ISO 12944-6 (2018), C5M
  Approved topcoat for NEPCOAT Systems C and D
  Performance equivalent to AWWA D102 OCS #5 & 6 finish coat
  Qualified to MIL-PRF-24635, Type V and VI, Class 1 and 2,
  Grade A and B, Comp 2
  NSF Certified Environmental Product Declaration (EPD) available

- NSF Certified Environmental Product Declaration (EPD) available on Ecomedes
- California Department of Public Health (CDPH) available on **Ecomedes**

#### PERFORMANCE CHARACTERISTICS

Substrate: Steel

Surface Preparation\*: SSPC-SP10, 2-3 mil (50-75 micron) profile System Tested\*:

1 ct. Macropoxy 646 @ 8.0-10.0 mils (200-250 microns) 1 ct. Sher-Loxane 800 @ 4.0-6.0 mils (100-150 microns)

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	119 mg loss
Adhesion	ASTM D4541	3494 psi (Cohesive fail)
Corrosion Weathering	ASTM D5894 10 cycles 3360 hours	Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 for rusting
Direct Impact Resistance	ASTM D2794	56 in-lbs
Dry Heat Resistance	ASTM D2485 (B) @ 300°F/149°C	Passes - No cracks or discoloration
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Pencil Hardness	ASTM D3363	5H
Salt Fog Resistance	ASTM B117 (5000 hours)	Rating 10 per ASTM D714 for blistering; Rating 7 per ASTM D610 for rusting

<sup>\*</sup>Pot life is dependent upon paint temperature and mixed volume 1Gloss

<sup>&</sup>lt;sup>2</sup>Semi-Gloss



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## SHER-LOXANE® 800 TWO COMPONENT POLYSILOXANE

B80-500 PART A PART A B80-550 B80V500 PART B B80V502 PART B

GLOSS SERIES SEMI-GLOSS SERIES STANDARD HARDENER **FAST CURE / LOW TEMP HARDENER** 

Revised: June 11, 2025

# **PRODUCT INFORMATION**

1401-1

RECOMMENDED	STSTEINS
	Dry Film Thicknes

DECOMMENDED SYSTEM

		Dry Film Th	ickness / ct. (Microns)
Steel:			
1 ct.	Corothane I GalvaPac Zinc		
	Primer	3.0-4.0	(75-100)
1-2 cts.	Sher-Loxane 800	4.0-6.0	(100-150)
Steel. At	mospheric:		
1-2 cts.		4.0-8.0	(100-200)
1 ct.	Sher-Loxane 800	5.0-6.0	(100-200) (125-150)
Stool At	mospheric:		
	Fast-Clad Zinc HS	3.0-4.0	(75-100)
	SeaGuard 5000 HS	4.0-8.0	(100-200)
	Sher-Loxane 800	5.0-6.0	(125-150)
Steel Or	rganic Zinc/Polysiloxane, Atmo	osnheric:	
	Zinc Clad 4100	3.0-5.0	(75-125)
1 ct.		4.0-6.0	(100-150)
Stool Or	ganic Zinc/Polysiloxane/Polys	ilovano Atmo	enhorice
	Zinc Clad 4100	3.0-5.0	(75-125)
	Sher-Loxane 800	3.0-5.0	(75-125)
	Sher-Loxane 800	3.0-5.0	(75-125)
Stool In	organic Zinc/Polysiloxane, Atr	noenhoric:	,
	Zinc Clad II Plus	2.0-4.0	(50-100)
1 ct.		4.0-6.0	(100-150)
			,
	organic Zinc/Polysiloxane/Polys Zinc Clad II Plus	2.0-4.0	
I UL.	ZIIIC CIAU II FIUS	2.0-4.0	(50-100)

1 ct.	Zinc Clad II Plus	2.0-4.0	(50-100)
1 ct.	Sher-Loxane 800	3.0-5.0	(75-125)
1 ct	Sher-Loxane 800	3.0-5.0	(75-125)

Concrete, Epoxy/Polysiloxane, Atmospheric, Immersion\*\*:

	o, =posty:: oiyonostanio, : t	,	
1 ct.	Dura-Plate 6000	50.0-125.0	(1,250-3,125)
1 ct.	Sher-Loxane 800	3.0-5.0	(75-125)

#### Approved Primers:

Steel, Atmospheric 1 Ct. Zinc Clad II (85) Zinc Clad IV (85) 1 Ct. 2 Cts. 1 Ct. Sher-Loxane 800 Macropoxy 267 \*1-2 Cts. Macropoxy 646 Macropoxy 4600 Zinc Clad 2500 1 Ct. 1 Ct

Steel, Atmospheric, Immersion\*\*

\*1-2 Cts. Macropoxy 646

Concrete, Atmospheric, Immersion\*\*

1-2 Cts Macropoxy 646

\*Approved intermediate over Zinc Clad II (85) or self

Approved for use in Fresh/Raw, Salt, and Tap/Non-PW water types ONLY. Not intended to be used as a lining.

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

#### 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.

#### 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

Minimum recommended surface preparation:

Iron & Steel: SSPC-SP6/NACE 3, 2-3 mil (50-75 micron) profile SSPC-SP10/NACE 2, 2-3 mil (50-75 micron) profile Atmospheric: Immersion:

Concrete & Masonry:
Atmospheric: SSPC-SP13/NACE 6 - 4.3.1 or 4.3.2 or ICRI No. 310.2R
CSP 1-2
Immersion: SSPC-SP13/NACE 6 - 4.3.1 or 4.3.2 or ICRI No. 310.2R

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

#### **TINTING**

For Atmospheric Service: 150% tint strength with Maxitoner/GIS colorants only into Part A. Do not exceed 15 oz/gal.

For Immersion Service: Tint pastel colors into white tint base only (B80W0501). Do not exceed 3 oz/gal. Five minutes minimum mixing on a mechanical shaker is requires for complete mixing of color.

Tinting the Chromatic Yellow base is optional, but recommended for optimal coverage and hide.

#### Application Conditions

Recommended Temperature (air, surface, material): with Standard Hardener\*: 50°F (10°C) minimum (50-90% RH) 120°F (50°C) maximum with Fast Cure Hardener: 20°F (-5°C) minimum (10-50% RH) 77°F (25°C) maximum At least 5°F (2.8°C) above dew point

\*Below 77°F (25°C), for the semi-gloss sheen ONLY, you may see up to a week delay in low sheen achievability.

NOTE: The curing mechanism of Sherloxane 800 is driven by primarily temperature, but it is also affected by relative humidity. In making a choice of which curing agent to use, temperature is the overriding factor. For example, at low humidities (<50% RH) and above 77°F (25°C), the standard hardener should be used to give the most useable pot life for application, but the drying times may be slower than those stated on the PDS. Consult your Sherwin-Williams representative for more details.

#### ORDERING INFORMATION

Packaging

Part A: 0.75 gallons (2.8L) in a 1 gallon container Part B: 0.19 gallons (0.7L) in a quart container 1.25 gallons (4.7L) mixed Part A: 1 gallon (3.8L):-

gallon (3.8L) in a 1 gallon container quart (0.9L)

Part B:

5 gallons (18.9L) mixed
Part A: 4 gallons (15.1L) in a 5 gallon (18.9L) container
Part B: 1 gallon (3.8L)

#### 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



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B80-500 B80-550 PART A PART A B80V500 PART B PART B B80V502

GLOSS SERIES SEMI-GLOSS SERIES STANDARD HARDENER **FAST CURE / LOW TEMP HARDENER** 

Revised: June 11, 2025

# **APPLICATION BULLETIN**

1401-1

#### 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 - Atmospheric

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 best 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 / 50 microns). Coat any bare steel the same day as it is cleaned or before flash rusting occurs.

Iron & Steel - Immersion

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 mils / 50 microns). Coat any bare steel the same day as it is cleaned or before flash rusting occurs.

Concrete and Masonry - Atmospheric
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI
No. 310.2R, CSP 1-2. 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. Fill bug
holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Concrete and Masonry - Immersion
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI
No. 310.2R, CSP 2-3. 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 bardeners. Fill but moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer

Stainless & Galvanized Steel

Allow galvanized to weather a minimum of six months prior to coating. If that is not possible, or for stainless steel, SSPC-SP16 must be followed obtaining a surface profile of minimum 1.5 mils (38 microns). Optimum surface profile will not exceed 2.0 mils (50 microns)

Previously Painted\* Surfaces

If the surface is 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.

\*It is not recommended to use Sher-Loxane 800 over surfaces previously coated with a water based coating.

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

#### **APPLICATION CONDITIONS**

Recommended Temperature (air, surface, material):
with Standard Hardener\*: 50°F (10°C) minimum
(50-90% RH) 120°F (50°C) maximum
with Fast Cure Hardener: 20°F (-5°C) minimum
(10-50% RH) 77°F (25°C) maximum
At least 5°F (2.8°C) above dew point
\*Below 77°F (25°C), for the semi-gloss sheen ONLY, you may see up to a

week delay in low sheen achievability.

NOTE: The curing mechanism of Sherloxane 800 is driven by primarily temperature, but it is also affected by relative humidity. In making a choice of which curing agent to use, temperature is the overriding factor. For example, at low humidities (<50% RH) and above 77°F (25°C), the standard hardener should be used to give the most useable pot life for application, but the drying times may be slower than those stated on the PDS. Consult your Sherwin-Williams representative for more details.

#### 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.

Reducer: MEK or Oxsol 100, up to 10% by volume

use Oxsol 100 or High Solids Compliant Clean Up\*\*: Thinner #1 - Fast

\*\*see Performance Tips section on last page for more information

Airless Sprav

**Conventional Spray** 

Gun ......Binks 95 Fluid Nozzle ......67 Air Nozzle......667 Atomization Pressure.....60 psi (4 bar) Fluid Pressure......20 psi (0.7 bar)

**Plural Component Spray** 

Consult your SW sales or technical service representative

.....Natural Bristle Note: Required film thickness may not be achieved in one coat

Cover ......3/8" woven with solvent resistant core

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



# Protective & Marine Coatings

# SHER-LOXANE® 800 TWO COMPONENT POLYSILOXANE

PART A B80-500
PART A B80-550
PART B B80V500
PART B B80V502

GLOSS SERIES SEMI-GLOSS SERIES STANDARD HARDENER FAST CURE / LOW TEMP HARDENER

Revised: June 11, 2025

## **APPLICATION BULLETIN**

1401-1

#### **APPLICATION PROCEDURES**

Surface preparation must be completed as indicated.

Mix contents of each component at a 4:1 ratio by volume (A:B) Mix with a Jiffy type mixer.

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

Recommended Spreading Rate per coat:				
Minimum Maximur				
Wet mils (microns)	5.0	(125)	7.0	(175)
Dry mils (microns)	4.0	(100)	6.0	(150)
~Coverage sq ft/gal (m²/L)	240	(6.0)	360	(9.0)
Theoretical coverage <b>sq ft/gal</b> (m²/l ) @ 1 mil / 25 microns dft	1443	(35.4)		

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

#### Drying Schedule @ 5.0 mils wet (125 microns):

	@ 77°F/25°C	@ 100°F/40°C	@ 120°F/50°C
	50% RH	50% RH	50% RH
To touch:	3 hours	2.5 hours	2 hours
To handle:	6 hours	5 hours	4 hours
To recoat:			
minimum:	7 hours	6 hours	5 hours
maximum:	1 year	1 year	1 year
To cure:	7 days	4 days	3 days
Pot Life*:	4 hours¹ 2 hours²	4 hours <sup>1</sup> 1.5 hours <sup>2</sup>	3 hours <sup>1</sup> 1.5 hours <sup>2</sup>
Sweat-in-Time:	None Required	1	

with Fast Cure / Low Temp Hardener:		
@ 20°F/-5°C	@ 50°F/10°C	@ 77°F/25°C
10% RH	40% RH	50% RH
12 hours	3 hours	1 hour
75 hours	7 hours <sup>1</sup>	2 hours
	o nodro	
24 hours	9 hours	4 hours
1 year	1 year	1 year
14 days	7 days	7 days
	@ 20°F/-5°C 10% RH 12 hours 75 hours 24 hours 1 year	@ 20°F/-5°C       @ 50°F/10°C         10% RH       40% RH         12 hours       3 hours         75 hours       7 hours¹         6 hours²         24 hours       9 hours         1 year       1 year

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

Pot Life\*: 4 hours

Sweat-in-Time: None Required

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

#### PERFORMANCE TIPS

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

Do not mix previously catalyzed material with new.

Part B is moisture sensitive. Do not tint. Only open when ready to be catalyzed immediately.

Clean Up: VOC Restricted Areas (≤25 g/L, or ≤3%): use Oxsol 100 or High Solids Compliant Thinner #1 - Fast. Other areas (>25 g/L, or >3%): use Oxsol 100, High Solids Compliant Thinner #1 - Fast, MEK, MIBK, or MAK. Choose a solvent that is compliant in your area. Confirm compliance with state and local air quality rules before use.

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

#### SAFETY PRECAUTIONS

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<sup>\*</sup>Pot life is dependent upon paint temperature and mixed volume ¹Gloss

<sup>&</sup>lt;sup>2</sup>Semi-Gloss