

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

# TANK CLAD HS

**B62W80** PART A B62L80 PART A PART B **B60V80** PART B B60V85

**SANITARY WHITE** LIGHT BLUE STANDARD HARDENER LOW TEMP HARDENER

Revised: March 25, 2024

## **PRODUCT INFORMATION**

4.79

#### **PRODUCT DESCRIPTION**

TANK CLAD HS is an 80% volume solids, amine cure epoxy designed for corrosion protection of equipment, piping, tanks and vessels exposed to corrosive immersion condition including wastewater, salt water, and petrochemical commodities.

Chemical and abrasion resistant Compatible with cathodic protection Outstanding application properties for intricate construction

#### PRODUCT CHARACTERISTICS

Finish: Semi-gloss

Color: Sanitary White, Light Blue

**Volume Solids:** 80% ± 2%, mixed Weight Solids: 90% ± 2%, mixed

VOC (EPA Method 24): <250 g/L; 2.1 lb/gal, mixed Mix Ratio: 2 component, premeasured 4:1

#### Recommended Spreading Rate per coat: Minimum Maximum Wet mils (microns) **6.0** (150) **10.0** 250 Dry mils (microns) 5.0 (125) 8.0\* (200)\*

~Coverage sq ft/gal (m²/L) **160** (3.9) **255** (6.2) Theoretical coverage sq ft/

**1280** (31.3) gal (m²/L) @ 1 mil/25 micron dft

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance. See recommended systems on reverse side

<u>Drying Schedule @ 10.0 mils wet (250 microns):</u>				
With B60V80	@ 55°F/13°C	@ 77°F/25°C	@ 120°F/49°C	
(Standard Hardener)		50% RH		
To touch:	7 hours	3 hours	1 hour	
Tack free:	8 hours	4 hours	2 hours	
To recoat:				
minimum:	48 hours	18 hours	4 hours	
maximum:	60 days	60 days	60 days	
To cure:	14 days	7 days	3 days	
If maximum recoat time is exceeded, abrade surface before recoating.				
Drying time is ten	nperature, humid	lity, and film thickr	ness dependent.	
Pot Life:	4 hours	2 hours	30 minutes	
Sweat-in-time:	30 minutes	15 minutes	Not required	

Sweat-in-time:	30 minutes	15 minutes	Not required	
Drying Scho	edule @ 10.0	mils wet (250	microns):	
With B60V85	@ 40°F/4.5°		0 77°F/25°C	
(Low Temp Hardener)	)		50% RH	
To touch:	24 hours		2 hours	
Tack free:	48 hours		2.5 hours	
To recoat:				
minimum:	48 hours		8 hours	
maximum:	30 days		14 days	
To cure:	10 days		5 days	
If maximum recoat time is exceeded, abrade surface before recoating.				
Drying time is ten	nperature, humidi	ty, and film thick	ness dependent.	
Pot Life:	2 hours	3	0 minutes	
Sweat-in-time:	10 minute	S	None	

NOTE: Do not use Tank Clad HS Low Temp Hardener above 80°F (27°C).

#### PRODUCT CHARACTERISTICS (CONT'D)

Shelf Life: 36 months, unopened

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

(38°C).

80°F (27°C), PMCC, mixed Flash Point:

Reducer\*: VOC Restricted Areas (≤250 g/L): use

Xylene, R2K4 up to 6% by volume.

VOC Restricted Areas (≤25 g/L, or ≤3%): use High Solids Compliant Thinner #1 - Fast (R7K111). Clean Up\*\*:

\*Other areas (>250 g/L): use Xylene, R2K4 up to 10% by volume. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

\*\*Other areas (>25 g/L, or >3%): use High Solids Compliant Thinner #1 - Fast (R7K111) or Xylene, R2K4. Choose a solvent that is compliant in your area. Confirm compliance with state and local air quality rules before use.

#### RECOMMENDED USES

· Municipal and Industrial Wastewater

Interior lining of steel tanks, piping vessels
 Submerged valves, pumps, support structures

Clarifier assemblies, catwalks

Below grade piping, structural steel equipment

Compatible with ductile iron substrates

USDA approved

#### PERFORMANCE CHARACTERISTICS

Substrate\*: Steel

Surface Preparation\*: SSPC-SP10/NACE 2

System Tested\*:

2 cts. Tank Clad HS @ 6.0 mils (150 microns) dft/ct \*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	120 mg loss
Adhesion	ASTM D4541	1000 psi
Direct Impact Resistance (on cold rolled steel)	ASTM G14	30 in. lb.
Dry Heat Resistance	ASTM D2485 (discolors)	200°F (93°C)
Flexibility (on cold rolled steel)	ASTM D522, 180° bend, 1" mandrel	Passes
Immersion	18 months fresh and salt water	Passes, no rusting, blistering, or loss of adhesion
Moisture Condensation Resistance	ASTM D4585, 100°F (38°C), 1000 hours	No blistering, underfilm corrosion, or rust creepage observed
Pencil Hardness	ASTM D3363	4H
Salt Fog Resistance	ASTM B117, 1000 hours	No blistering, underfilm corrosion, or rust creepage observed

Epoxy coatings may darken or yellow following application and curing.



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

# TANK CLAD HS

**B62W80** PART A B62L80 PART A PART B **B60V80** PART B B60V85

**SANITARY WHITE** LIGHT BLUE STANDARD HARDENER LOW TEMP HARDENER

Revised: March 25, 2024

### PRODUCT INFORMATION

4.79

RECOMMENDED	SYSTEMS
INDUDINIBLE	OIGILING

Dry Film Thickness / ct. (Microns) Mils

(100-150)

4 0-6 0

#### Immersion, \*Steel

Tank Clad HS

#### Immersion or Buried, Steel or Ductile Iron:

Low -	Medium Corrosivity		
1 ct.	Tank Clad HS	5.0-8.0	(125-200)
1 ct.	Tank Clad HS	5.0-8.0	(125-200)
Mediu	ım - High Corrosivity		
1 ct.	Tank Clad HS	5.0-8.0	(125-200)
1 ct.	Tank Clad HS	5.0-8.0	(125-200)
1 ct.	Tank Clad HS	5.0-8.0	(125-200)

#### Atmospheric, Steel, Galvanized or Ductile Iron:

1 ct. 1 ct.	Tank Clad HS Hi-Solids Polyurethane	4.0-6.0 3.0-5.0	(100-150) (75-125)
	Acrolon 218 HS	3.0-6.0	(75-150)
or 1 ct.	Sher-Loxane 800	4.0-6.0	(100-150)

#### Atmospheric & Immersion, Concrete or Masonry\*:

Low -	Medium Corrosivity		
1 ct.	Tank Clad HS	5.0-8.0	(125-200)
1 ct.	Tank Clad HS	5.0-8.0	(125-200)
Mediu	m - High Corrosivity		
1 ct.	Tank Clad HS	5.0-8.0	(125-200)
1 ct.	Tank Clad HS	5.0-8.0	(125-200)
1 ct.	Tank Clad HS	5.0-8.0	(125-200)

<sup>\*</sup>Concrete surfaces may require fill and patch prior to coating

The systems listed above are representative of the product's use, other systems may be appropriate. Also suitable for Ductille Iron, Aluminum, and Galvanized surfaces.

#### 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.

#### 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:

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

Concrete & Masonry:

SSPC-SP 13/NACS 6-4.3.1 or 4.3.2, or ICRI No. 310.2R, CSP 2-3 Immersion:

Ductile Iron Pipe:

Atmospheric: NAPF 500-03-03 Power Tool Cleaning Buried &

Immersion: NAPF 500-03-04 Abrasive Blast Cleaning Cast Ductile

Iron Fittings: NAPF 500-03-05 Abrasive Blast Cleaning

Surface Preparation Standards Swedish Std. SIS055900 ISO 8501-1 BS7079:A1 Condition of SSPC NACE Surface Sa 3 Sa 2.5 Sa 2 Sa 1 C St 2 D St 2 C St 3 D St 3 SSPC SP 5 SP 10 SP 6 SP 7 SP 2 SP 2 SP 3 SP 3 White Metal Near White Metal Commercial Blast Brush-Off Blast Sa 3 Sa 2.5 Sa 2 234 Rusted Pitted & Rusted Rusted Pitted & Rusted Hand Tool Cleaning Power Tool Cleaning

#### TINTING

#### Do not tint.

#### APPLICATION CONDITIONS

Temperature: Standard Hardener 55°F (13°C) minimum, 120°F (49°C) maximum 40°F (4.5°C) minimum, 80°F (27°C) maximum Low Temp Hardener

(air, surface, and material)

Àt least 5°F (2.8°C) abové dew point 85% maximum Relative humidity:

Do not use Low Temp Hardener (B60V85) above 80°F (27°C).

Refer to product Application Bulletin for detailed application information.

#### ORDERING INFORMATION

Packaging: Part A:

5 gallons (18.9L) mixed 4 gallons (15.1L) in a 5 gallon (18.9L)

container Part B: 1 gallon (3.78L)

Weight: 14.4 ± 0.2 lb/gal; 1.73 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 Contact your 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.



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

# TANK CLAD HS

**B62W80** PART A B62L80 PART A PART B **B60V80** PART B B60V85

**SANITARY WHITE** LIGHT BLUE STANDARD HARDENER LOW TEMP HARDENER

Revised: March 25, 2024

## APPLICATION BULLETIN

4.79

#### 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

Carbon Steel, Immersion Service:

Carbon Steel, Immersion Service:
Clean and degrease the surface prior to abrasive blasting per SSPC-SP 1 Solvent Cleaning. Methods described in SSPC-SP 1 include solvents, alkali, detergent/water, emulsions, and steam. The surface shall be abrasive blasted to SSPC-SP10/NACE No. 2 Near-White Blast Cleaning with a 2-3 mil (50-75 micron) profile. The anchor pattern shall be sharp with no evidence of a polished surface. The finished surface shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter with no more than 5% staining. After blasting, all dust and loose residue should be removed from the surface by acceptable means. Coat steel the same day as it is prepared and prior to the formation of rust.

Iron & Steel, Atmospheric Service:
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 / 50 microns). Prime any bare steel within 8 hours or before flash rusting accurs or before flash rusting occurs.

**Ductile Iron Pipe, Atmospheric Service:**Minimum surface preparation is Power Tool Clean per NAPF 500-03-03.
Remove all oil and grease from surface by Solvent Cleaning per NAPF

Ductile Iron Pipe, Buried and Immersion Service:

Minimum surface preparation is Abrasive Blast Cleaning per NAPF 500-03-04. Ductile iron pipe external surfaces, in some cases, can be damaged by excessive abrasive blast cleaning beyond this standard. Remove all oil and grease from surface by Solvent Cleaning per NAPF 500-03-01.

**Ductile Iron Fittings:** 

Minimum surface preparation is Abrasive Blast Cleaning of Cast Ductile Iron Fittings per NAPF 500-03-05. Remove all oil and grease from surface by Solvent Cleaning per NAPF 500-03-01.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. 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 hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910.

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 1-3.

Previously Painted Surfaces:
If in sound condition, clean the surface of all foreign material. Scarify the surface to create the desired surface profile. Apply coatings on 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.

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		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
Harid 1001 Cleaning	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
Power Tool Cleaning	Pitted & Rusted	D St 3	D St 3	SP 3	-

#### APPLICATION CONDITIONS

Temperature:

55°F (13°C) minimum, 120°F (49°C) Standard Hardener

Low Temp Hardener 40°F (4.5°C) minimum, 80°F (27°C)

maximum

(air, surface, and material)

At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Do not use Low Temp Hardener (B60V85) above 80°F (27°C).

#### 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*	.VOC Restricted Areas (≤250 g/L): use Xylene, R2K4 up to 6% by
	volume.
Clean up**	.VOC Restricted Areas (≤25 g/L, or
	≤3%): use High Solids Compliant
	≤3%): use High Solids Compliant Thinner #1 - Fast (R7K111).

\*Other areas (>250 g/L): use Xylene, R2K4 up to 10% by volume. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

\*\*Other areas (>25 g/L, or >3%): use High Solids Compliant Thinner #1 - Fast (R7K111) or Xylene, R2K4. Choose a solvent that is compliant in your area. Confirm compliance with state and local air quality rules before use.

Use of any other solvent than Xylene, R2K4 may affect the performance or compliance of this product for its intended service.

Airless Sprav

45:1 minimum
3600 psi minimum
3/8" IĎ
017"019"
30 mesh
Acceptable

**Brush** 

Brush......Natural Bristle Reduction......Not recommended

Roller

Cover ............3/8" - 1/2" woven with solvent resistant core Reduction.....Not recommended

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



# Protective & Marine Coatings

# TANK CLAD HS

PART A B62W80
PART A B62L80
PART B B60V80
PART B B60V85

SANITARY WHITE LIGHT BLUE STANDARD HARDENER LOW TEMP HARDENER

Revised: March 25, 2024

## APPLICATION BULLETIN

4.79

#### **APPLICATION PROCEDURES**

Surface preparation must be completed as indicated.

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

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

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

Recommended Spreading Rate per coat:			
	Minimum	Maximum	
Wet mils (microns)	<b>6.0</b> (150)	<b>10.0</b> 250	
Dry mils (microns)	<b>5.0</b> (125)	<b>8.0</b> * (200)*	
~Coverage sq ft/gal (m²/L)	<b>160</b> (3.9)	<b>255</b> (6.2)	
Theoretical coverage <b>sq ft/ gal</b> (m²/L) @ 1 mil/25 micron dft	1280 (	31.3)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance. See recommended systems on reverse side

<u>Drying Schedule @ 10.0 mils wet (250 microns):</u>				
With B60V80	@ 55°F/13°C	@ 77°F/25°C	@ 120°F/49°C	
(Standard Hardener)		50% RH		
To touch:	7 hours	3 hours	1 hour	
Tack free:	8 hours	4 hours	2 hours	
To recoat:				
minimum:	48 hours	18 hours	4 hours	
maximum:	60 days	60 days	60 days	
To cure:	14 days	7 days	3 days	
If maximum recoat time is exceeded, abrade surface before recoating.				
Drying time is ten	nperature, humid	lity, and film thickr	ness dependent.	
Pot Life:	4 hours	2 hours	30 minutes	
Sweat-in-time:	30 minutes	15 minutes	Not required	

Drying Sche	<u>dule @ 10.0 mils w</u>	<u>et (250 microns):</u>
With B60V85	@ 40°F/4.5°C	@ 77°F/25°C
(Low Temp Hardener)		50% RH
To touch:	24 hours	2 hours
Tack free:	48 hours	2.5 hours
To recoat:		
minimum:	48 hours	8 hours
maximum:	30 days	14 days
To cure:	10 days	5 days
If maximum recoat t	ime is exceeded, abrade	surface before recoating.
Drying time is temperature, humidity, and film thickness dependent.		
Pot Life:	2 hours	30 minutes
Sweat-in-time:	10 minutes	None

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

NOTE: Do not use Tank Clad HS Low Temp Hardener above 80°F (27°C).

#### PERFORMANCE TIPS

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

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

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

Insufficient ventilation, incomplete mixing, miscatalyzation, and external heaters may cause premature yellowing.

Excessive film build, poor ventilation, and cool temperatures may cause solvent entrapment and premature coating failure.

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 Xylene, R2K4.

**For Immersion Service:** (if required) Holiday test in accordance with ASTM D5162 for steel, or ASTM D4787 for concrete.

Do not use Tank Clad HS Low Temp Hardener above 80°F (27°C)

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

#### **CLEAN UP INSTRUCTIONS**

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

#### **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.

#### 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.