

## **The Sherwin-Williams Company**

### **DuraPlate UHS Epoxy**

#### **PRODUCT DESIGNATIONS**

Part A: B62W210, B62AW210, B62BW210, B62GV210, B62AV210, B62V210

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MIL-PRF-23236

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If this product is to be applied as part of a coating system, all components of the system must be as listed on the QPL.

This NAVSEA-REVIEWED ASTM F-718 data sheet is the only data sheet approved for use when utilizing this coating for U.S. Navy preservation projects. NAVSEA's review covers only the application process for the material. The review does not denote the material as a qualified product, nor does it constitute an approval for purchase/procurement of the material. For products on the Qualified Products List (QPL) for this MILSPEC, please refer to <http://qpldocs.dla.mil/search/default.aspx>.

Questions regarding modifications or updates of this ASTM F-718 shall be directed toward:

NSWCPD

[NSWCPD\\_ASTM\\_F718.fct@navy.mil](mailto:NSWCPD_ASTM_F718.fct@navy.mil)

## ASTM F 718



## SHIPBUILDERS AND MARINE PAINTS AND COATINGS PRODUCT/PROCEDURE DATA SHEET

CONTINUATION SHEET USED: ☒ YES ☐ NO

Date: 02/19/10 Rev.

## I. GENERIC TYPE AND DESCRIPTION: UHS Epoxy

Specification Number, Type, Class and/or Grade (If Applicable): MIL-PRF-23236

## II. MANUFACTURERS DATA:

(a) MANUFACTURER: The Sherwin-Williams Company

(b) PRODUCT DESIGNATION: DuraPlate UHS Epoxy  
Part A: B62W210, B62AW210, B62BW210, B62GV210, B62AV210, B62V210

(c) COLOR(S): White, light green, light gray, haze gray, black (Note only white and light green are approved for potable water)

(d) USES: Ballast tanks, fuel tanks, potable water tanks, non-nuclear boiler feedwater tanks. Where edge protection film build properties are required.

(e) TECHNICAL SERVICE REPRESENTATIVE

(Include Telephone Nos.): 1-877-877-7115 or your local Sherwin-Williams Representative

(f) NOT RECOMMENDED FOR: CHT tanks, immersion in methanol.

## III. PROPERTIES:

(a) % VOLUME SOLIDS (ASTM D 2697): 98%

(b) % WEIGHT SOLIDS (ASTM D 1475): 98%

(c) FLASH POINT (ASTM TEST METHOD D 93 OR D 56 OR D 3278): &gt;200°F

(d) WEIGHT PER VOLUME: (FTMS 141a4184.1):  $10.5 \pm 0.2$  lbs per mixed gallon

(e) % EDGE RETENTION (IF REQUIRED BY APPLICABLE SPECIFICATION): &gt;70%

(f) SHELF LIFE: 36 months

(g) VISCOSITY (STATE TEST METHOD TO BE USED: COMPONENT A: &gt;100 KU's per ASTM D562, see receipt inspection parameters.

COMPONENT B: 100-140 cps per ASTM D2196, see receipt inspection parameters.

MIXED: 85-130 KU's per ASTM D562, see receipt inspection parameters.

(h) PACKAGING: Part A: 4 gallons in 5 gallon container. Part B: 1 gallon container. May also come in gallon kits or drums as requested by shipyard/contractor.

(i) NUMBER OF COMPONENTS: 2

(j) GLOSS (ASTM D 523): High gloss (80+)

(k) STORAGE REQUIREMENTS: TEMP. MIN. 40°F MAX. 100°F

ADDITIONAL PAINT STORAGE REQUIREMENTS: Protected indoor storage.

(l) VOLATILE ORGANIC COMPOUND (EPA TEST METHOD 24):  $\leq 100$  g/L(m) WEIGHT OF DRY FILM (WEIGHT/FT<sup>2</sup> AT 1 MIL THICKNESS): 0.0066 lbs

(n) SPECIAL PROPERTIES (e.g., STAIN RESISTANCE, LOW SOLAR ABSORBANCE, MOISTURE TOLERANCE): Edge retention, high build, high performance, low VOC coating

## IV. SURFACE PREPARATION MINIMUM REQUIREMENTS (USE SPECIFIC STANDARD NUMBERS):

(a) INITIAL – SSPC-SP 10 Near White Metal Blast. Follow NAVSEA Standard Item 009-32 guidelines.

(b) TOUCH-UP – SSPC-SP 11 Power Tool Clean to Bare Metal. Clean and abrade surface prior to recoating.

(c) PROFILE (INCLUDE METHOD USED) - MIN. 2 mils MAX. 4 mils (Testex Tape)

(d) SPECIAL INSTRUCTIONS – Profile 2-4 mils recommended, up to 5 mils acceptable. Follow NAVSEA Standard Item 009-32 guidelines.

(e) PRIMER REQUIREMENTS (IF APPLICABLE): Apply over DuraPlate UHS Epoxy Primer.

(f) MAXIMUM ALLOWABLE CONDUCTIVITY (BRESLE PATCH METHOD): Follow NAVSEA Standard Item 009-32 guidelines.

(g) MAXIMUM DEGREE OF FLASH RUSTING ALLOWABLE (LIST COMMERCIAL STANDARD): SSPC-SP 12 WJ 2L

SPECIAL SAFETY PRECAUTIONS:  
See Material Safety Data Sheet

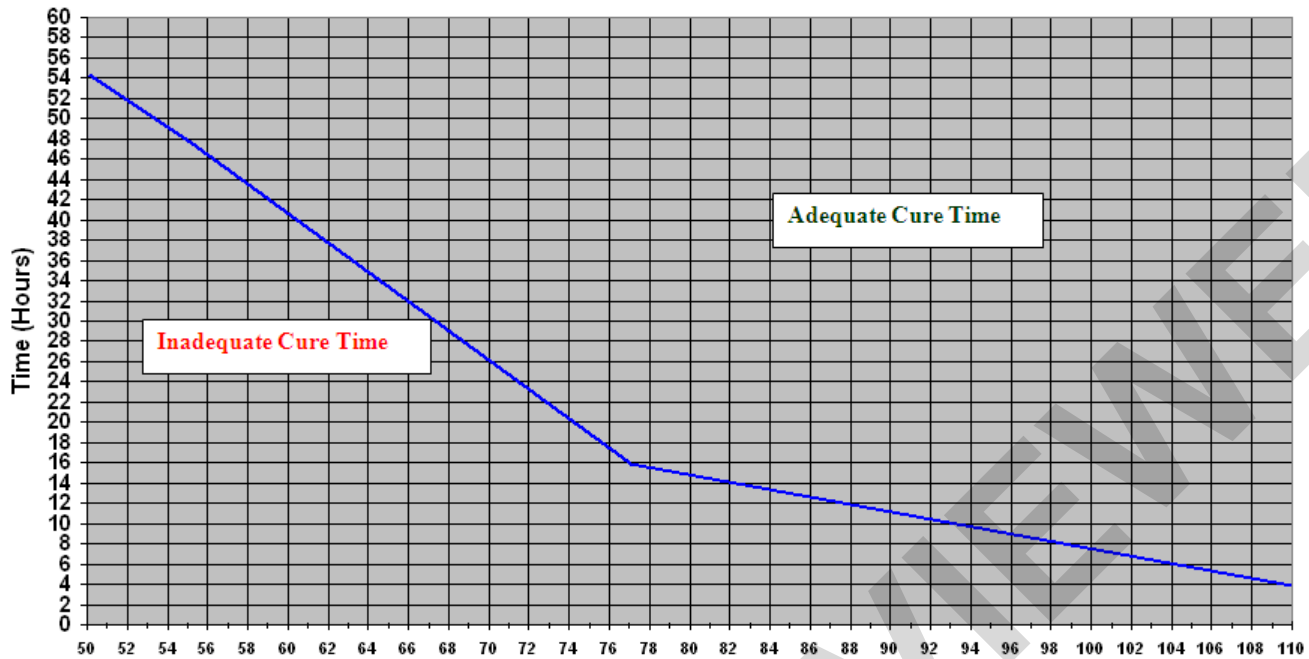
V. MIXING PROCEDURES:

- (a) MIXING RATIOS BY WEIGHT – N/A  
BY VOLUME – 4:1
- (b) INDUCTION TIME – 15 minutes at 55°F, none at 77°F
- (c) RECOMMENDED SOLVENT – THINNING – NO THINNING ALLOWED  
CONFINED AREAS - NO THINNING ALLOWED  
NON-CONFINED AREAS - NO THINNING ALLOWED  
CLEAN UP – R7K104
- (d) THINNING REQUIREMENTS (RATIO) – NO THINNING ALLOWED
- (e) POT LIFE - 45 minutes @ 55°F  
45 minutes @ 77°F
- (f) SPECIAL INSTRUCTIONS – Mix contents of each component thoroughly using power agitation. Make certain no pigments remain on the bottom or sides of the can, then mix 4 parts by volume Part A with 1 part by volume Part B. Thoroughly agitate the mixture with power agitation. When applied via plural pump, final mixing will be performed in the static mixer.

VI. APPLICATION:

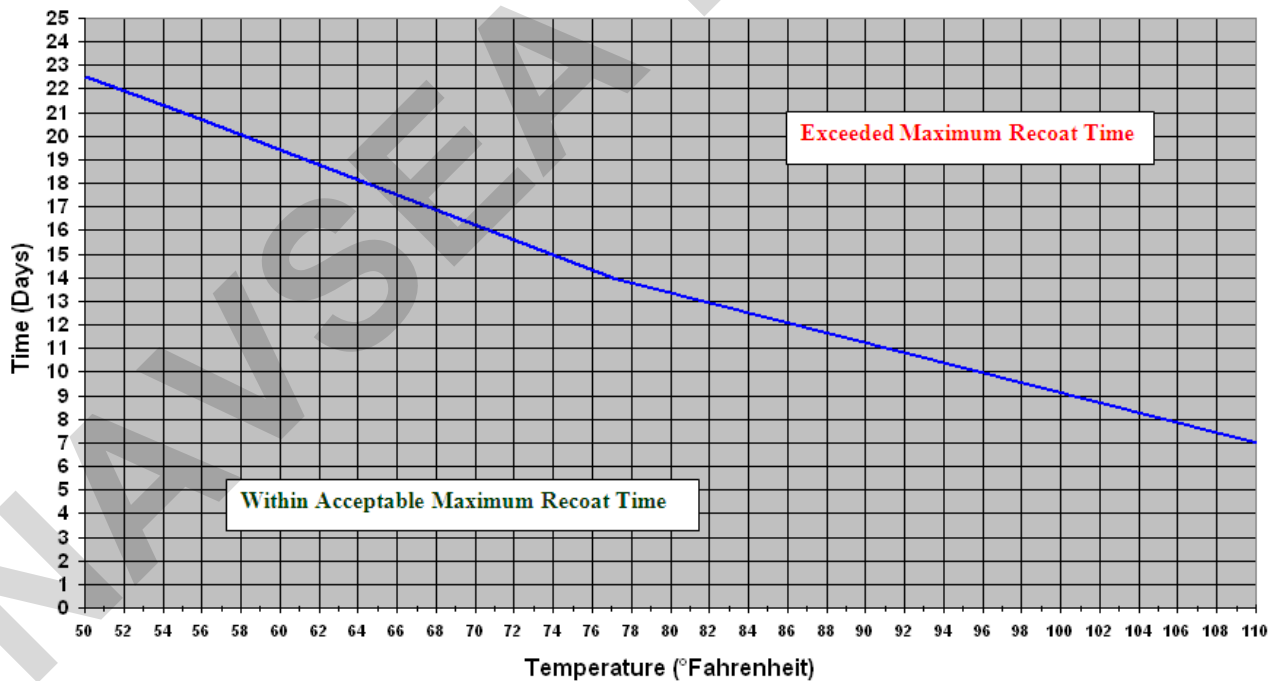
- (a) ENVIRONMENTAL LIMITATIONS -
- SUBSTRATE TEMPERATURE: MIN. 50°F MAX. 110°F
- MINIMUM SUBSTRATE TEMPERATURE DIFFERENCE ABOVE THE DEW POINT – 5°F
- RELATIVE HUMIDITY: Refer to NAVSEA Standard Item 009-32
- AMBIENT TEMPERATURE: MIN. 50°F MAX. 110°F
- (b) FILM THICKNESS (SSPC-PA 2):
- PER COAT:  
WET MIN. 10 mils WET MAX. 12 mils  
DRY MIN. 10 mils DRY MAX. 12 mils
- TOTAL SYSTEM: One coat of DuraPlate UHS Primer to be applied at 4-8 mils and then topcoated with DuraPlate UHS at 10-12 mils.
- DRY MIN. 14 mils DRY MAX. 20 mils for primer/topcoat system
- (c) DRY TIMES (ASTM D 1640) – See attached Figures 1-4.
- (d) EQUIPMENT REQUIREMENTS (INCLUDE PREFERRED, SUITABLE, NOT SUITABLE REQUIREMENTS) –
- IF PLURAL COMPONENT EQUIPMENT IS REQUIRED, STATE SO – Plural component pump preferred. Can be sprayed via traditional airless spray unit if due diligence taken with monitoring potlife.
- IF HEATED LINES ARE REQUIRED, STATE SO – Heated lines not required.
- (e) SPECIAL INSTRUCTIONS –
- REPAIR PROCEDURES IF THE OVERCOAT WINDOW HAS BEEN EXCEEDED: Clean surface of coating per SSPC-SP 1, aggressively abrade surface with 80 grit sandpaper or equivalent to promote adhesion, clean surface to SSPC-SP 1 again.

Figures 1 & 2. Dura-Plate UHS Minimum Cure to Recoat & Handle Time



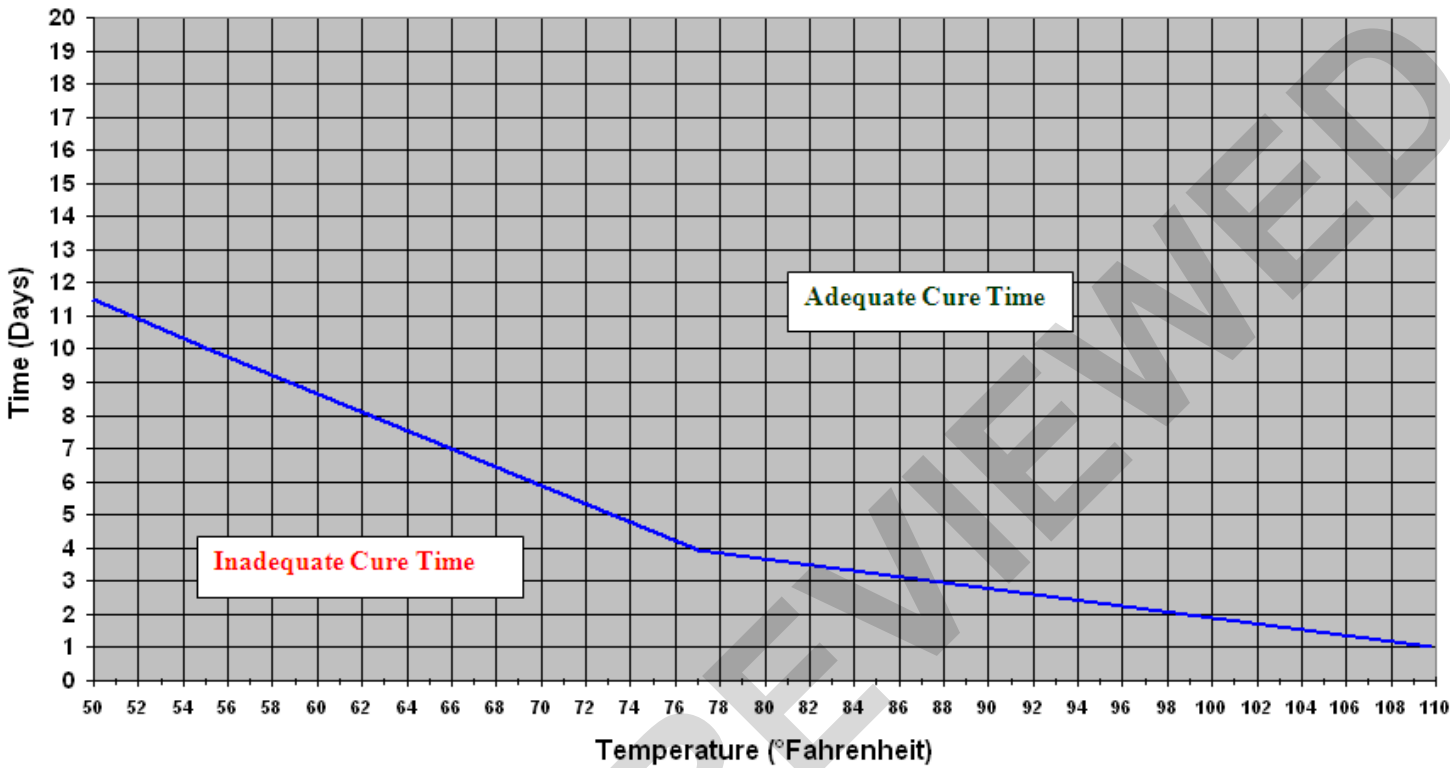
*The above curing schedule is at 12.0 mils wet and 50% relative humidity.  
Drying time is temperature, humidity, and film thickness dependent.  
The above information is provided for guideline use only.*

Figure 3. Dura-Plate UHS Maximum Cure to Recoat Time



*The above curing schedule is at 12.0 mils wet and 50% relative humidity.  
Drying time is temperature, humidity, and film thickness dependent.  
The above information is provided for guideline use only.*

Figure 4. Dura-Plate UHS Minimum Cure to Service Time



*The above curing schedule is at 12.0 mils wet and 50% relative humidity.  
Drying time is temperature, humidity, and film thickness dependent.  
The above information is provided for guideline use only.*

# ASTM F 718 CONTINUATION SHEET FOR

## SHIPBUILDERS AND MARINE PAINTS AND COATINGS PRODUCT/PROCEDURE DATA SHEET

Date 02/19/10 Rev.

I. GENERIC TYPE AND DESCRIPTION: UHS Epoxy  
Specification Number (If Applicable): MIL-PRF-23236

ADDITIONAL DATA/ INSTRUCTIONS:

II. MANUFACTURERS DATA:

ADD ADDITIONAL COMMENTS FROM PART II HERE

III. PROPERTIES:

ADD ADDITIONAL COMMENTS FROM PART III HERE

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS (USE SPECIFIC STANDARD NUMBERS):

ADD ADDITIONAL COMMENTS FROM PART IV HERE

V. MIXING PROCEDURES

ADD ADDITIONAL COMMENTS FROM PART V HERE

VI. APPLICATION REQUIREMENTS

ADD ADDITIONAL COMMENTS FROM PART VI HERE

WARRANTY DISCLAIMER: THE TECHNICAL DATA GIVEN HEREIN HAS BEEN COMPILED FOR THE ASSISTANCE OF THE USER AND GUIDANCE IS BASED ON THE EXPERIENCE AND KNOWLEDGE OF THE MANUFACTURER. HOWEVER, AS THE MANUFACTURER HAS NO CONTROL OVER THE USE OF THIS INFORMATION, NO WARRANTY EXPRESSED OR IMPLIED IS INTENDED OR GIVEN.



**SHERWIN-WILLIAMS®**  
**Protective & Marine Coatings**

## ***Sherwin-Williams ASTM F718 Addendum*** ***Use of CHLOR\*RID Salt Remover*** ***January 24, 2018***

Per 009-32 FY-18 CH-1 section 3.10.6.6 (and similarly noted in other FY versions of 009-32), the use of CHLOR\*RID salt remover is authorized. Sherwin-Williams provides this document as an ASTM F718 addendum for the following Sherwin-Williams MIL-PRF-23236 qualified products:

Fast Clad ER  
Fast Clad Primer  
Fast Clad Brush Grade  
SherPlate PW  
DuraPlate UHS Primer  
DuraPlate UHS  
NovaPlate UHS Primer  
NovaPlate UHS  
EuroNavy ES301 Series  
SeaGuard 5000 HS  
DuraPlate 235  
ExpressCote 150

When used in accordance with the manufacturers and the following instructions, Sherwin-Williams approves the use of CHLOR\*RID, in conjunction with the above products, for U.S. Navy related projects:

1. CHLOR\*RID is added to wash water at appropriate level per product recommendation.
2. After water washing with CHLOR\*RID, allow substrate to fully dry. ALL treated substrate surfaces MUST be abrasive blasted to an SSPC-SP10 Near White Metal condition post CHLOR\*RID application.
3. Failure to reblast all treated surfaces, regardless of their condition post CHLOR\*RID application, voids these instructions and subsequent implied or direct warranties.
4. Accomplish surface conductivity checks as required per 009-32 after SSPC-SP10 Near White Metal reblast. Follow pass/fail criteria established in 009-32 including additional remedial steps as necessary.
5. Please see appropriate references in NAVSEA Standard Item 009-32.

Mark Schultz  
Government Marine Manager  
Sherwin-Williams