NAVSEA REVIEWED ASTM F-718

The Sherwin Williams Company

Nova-Plate UHS Epoxy

PRODUCT DESIGNATIONS

B62W220, B62A220, B62V220, B62G220, B62V221, B62G221

MIL-PRF-23236

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

Sherwin-Williams ASTM F718 Shipbuilders & Marine Product/Procedure Data Sheet Nova-Plate UHS Epoxy

I. GENERIC TYPE & DESCRIPTION: Sherwin-Williams Nova-Plate UHS Epoxy

Specification No. (If Applicable): MIL-PRF-23236C

II. MANUFACTURING DATA:

(a) MANUFACTURER: The Sherwin-Williams Company

(b) PRODUCT DESIGNATION: B62W220, B62A220, B62V220, B62G220, B62V221, B62G221

(c) COLORS: White, Light Gray, Green

(d) USES: Well deck overheads, oil storage tank interiors, refined fuel storage tank interiors, CHT tanks. Where edge protection film build properties are required.

(e) TECHICAL SERVICE:

Customer Service Hotline 1-877-877-7115

(F) NOT RECOMMENDED FOR:

Immersion with methanol or methanol blends.

III. PROPERTIES:

(a) % VOLUME SOLIDS (ASTM D2697): 98 % +/- 2%

(b) FLASH POINT: >200°F

(c) WEIGHT/GALLON (ASTM D1475): 11.01 +/- 0.2 lbs.

(d) SHELF LIFE: 24 months

(e) VISCOSITY (ASTM D562): N/A

(f) PACKAGING:
Part A - 4 gal. container
Part B - 1 gal. container

(g) NUMBER OF COMPONENTS: 2

(h) GLOSS (ASTM D523): Gloss

(i) STORAGE REQUIREMENTS: Maintain material in protected storage between 40°F and 100°F.

(j) REGULATORY DATA: VOC: Less than 100 g/L (0.83 lbs/gal)

(k) WEIGHT OF DRIED FILM (WEIGHT PER SQUARE FOOT AT A GIVEN THICKNESS): 0.0063 lbs/sq ft/mil

SPECIAL SAFETY PRECAUTIONS

REFER TO MATERIAL SAFETY DATA SHEET (MSDS)

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS:

Refer to NAVSEA Standard Item 009-32

V. MIXING PROCEDURES:

(a) MIXING RATIO BY WEIGHT: N/A
BY VOLUME: 4:1

(b) INDUCTION TIME: None

(c) RECOMMENDED SOLVENT(S) : THINNING: N/A
CLEAN-UP: R7K104

(d) THINNING REQUIREMENTS (%): N/A

(e) POT LIFE: Fast Cure Hardener B62V220, B62G220 is 25 minutes @ 77°F
Standard Cure Hardener B62V221, B62G221 is 40 minutes @ 77°F

(f) SPECIAL INSTRUCTIONS:
Mix contents of each component thoroughly using power agitation. Make certain no pigment remains on the bottom or the sides 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. (For cartridge use, see next page.)

VI. APPLICATION:

(a) ENVIRONMENTAL LIMITATIONS:
TEMPERATURE: MIN. 50°F MAX. 110°F
% RELATIVE HUMIDITY: Refer to NAVSEA Standard Item 009-32

(b) FILM THICKNESS: Refer to NAVSEA Standard Item 009-32

(c) DRY TIMES - Recoat (Fast Cure Hardener B62V220, B62G220):
Minimum: Not recommended below 50°F
Minimum 24 hours @ 55°F, 12 hours @ 77°F, 4.25 hours @ 100°F @ 50% RH
Maximum 21days @ 55°F, 21 days @ 77°F, 14 days @ 100°F @ 50% RH

Immersion with Fast Cure Hardener B62V220, B62G220:
7 days @ 55°F, 5 days @ 77°F, 5 days @ 100°F @ 50% RH

Recoat (Standard Hardener B62V221, B62G221):
Minimum: Not recommended below 50°F
Minimum 36 hours @ 55°F, 14 hours @ 77°F, 6 hours @ 100°F @ 50% RH
Maximum 21days @ 55°F, 21 days @ 77°F, 14 days @ 100°F @ 50% RH

Immersion with Standard Hardener B62V221, B62G221:
Minimum 7 days @ 55°F, 5 days @ 77°F, 5 days @ 100°F @ 50% RH

(d) EQUIPMENT REQUIREMENTS: Airless spray or plural component. It is recommended to spray the stripe coat. Brush or roller are recommended for touch-up and repair only.

(e) SPECIAL INSTRUCTIONS:

If maximum recoat time is exceeded, abrade surface before recoating. Ensure that the substrate temperature is at least 5°F above the dew point prior to application. Reduction is not recommended. Application of coating below minimum or above maximum recommended spreading rate may adversely affect coating performance. For more options on performance tips, please refer to the Product Information Data Sheet. (For cartridge use, see next page.)

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.

Special Instructions for Dual-Barrel Cartridges

Section V (f) continued, Special Instructions (mixing):

If applying material using dual-barrel cartridges, agitate cartridges for approximately two minutes prior to use with a mechanical cartridge shaker.

Section VI (e) continued, Special Instructions (application):

When applying material via dual-barrel cartridges (spray or extrusion method), all cartridges must be phased-in and de-aired prior to use. Insert cartridge into dispensing gun, hold gun with cartridge and static mixer assembly pointing up and slowly pull gun trigger. Once both materials flow into the static mixer the cartridge is de-aired. Dispense first six inches of material from static mixer into waste receptacle. The cartridge is now phased-in and ready for use.

Heating the cartridges at 90-100^{o}F for 1-2 hours prior to use result in easier flow of coating with overall enhanced application and finished appearance. Do not heat cartridges above 120^{o}F.

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
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Sherwin-Williams