NAVSEA REVIEWED ASTM F-718

PPG Protective and Marine Coatings

ABC #3

Ablative Antifouling Coating

MIL-PRF-24647

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 https://assist.daps.dla.mil/quicksearch/

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

NSWCCD (215) 897-7411 nswccd astm f718@navy.mil

ASTM F 718

SHIPBUILDERS AND MARINE PAINTS AND COATINGS PRODUCT/PROCEDURE DATA SHEET

CONTINUATION SHEET USED: ☐ YES ☑ NO

Date: 8/2010 Rev.
I. GENERIC TYPE AND DESCRIPTION: Ablative Antifouling Coating Specification Number, Type, Class and/or Grade (If Applicable): MIL-PRF-24647
II. MANUFACTURERS DATA: (a) MANUFACTURER: PPG Protective and Marine Coatings 11605 Vimy Ridge Road, Alexander, AR 72202
(b) PRODUCT DESIGNATION: ABC #3
(c) COLOR(S): Red, Black
(d) USES: Underwater hull anti-fouling coating
(e) TECHNICAL SERVICE REPRESENTATIVE Paul Whitehead (678) 472-8284
(f) NOT RECOMMENDED FOR: N/A
III. PROPERTIES: (a) % VOLUME SOLIDS (ASTM D 2697): 52% ± 3%
(b) % WEIGHT SOLIDS (ASTM D 1475): 81.16
(c): FLASH POINT (ASTM TEST METHOD D 93 OR D 56 OR D 3278): 83°F
(d): WEIGHT PER VOLUME: (FTMS 141a4184.1): 16.7 – 18.3 lbs / gal
(e) % EDGE RETENTION (IF REQUIRED BY APPLICABLE SPECIFICATION): N/A
(f): SHELF LIFE: 3 years from date of manufacture
(g) VISCOSITY (STATE TEST METHOD TO BE USED:): COMPONENT A: 70 – 110 KU
COMPONENT B: NA
(h) PACKAGING: 5 gallon pails
(i): NUMBER OF COMPONENTS: 1
(j) GLOSS (ASTM D 523): <5 (Flat)
(k) STORAGE REQUIREMENTS: TEMP. MIN. <u>40°F</u> MAX. <u>100°F</u>
ADDITIONAL PAINT STORAGE REQUIREMENTS: Product should be stored at temperatures of 40° F – 100° F. The product may be subject to temperatures from 0° F to 140° F during transport for up to 30 days without adverse effects. If the product is exposed to more extreme temperatures or for a longer duration, please contact PPG technical services for an evaluation. Product temperatures must be 50° F – 90° F during mixing and application, unless otherwise stated in section V1.a. Note: Per NAVSEA Standard Item 009-32, storage requirements are MIN 65°F and MAX 85°F.
(I) VOLATILE ORGANIC COMPOUND (EPA TEST METHOD 24): 3.3 lbs / gal.
(m) WEIGHT OF DRY FILM (WEIGHT/FT ² AT 1 MIL THICKNESS): 0.016 lbs ± 3%
(n): SPECIAL PROPERTIES (e.g., STAIN RESISTANCE, LOW SOLAR ABSORBANCE, MOISTURE TOLERANCE): N/A
 IV. SURFACE PREPARATION MINIMUM REQUIREMENTS (USE SPECIFIC STANDARD NUMBERS): (a) INITIAL – For anticorrosive primer: Abrasive blast to SSPC-SP 10, Ultra High Pressure Water Jet to SSPC-SP 12/WJ-2L or otherwise refer to NAVSEA Standard Item 009-32. Primer surface must be clean and free of condensation or contaminants.
(b) TOUCH-UP – Clean, dry surface
(c) PROFILE (INCLUDE METHOD USED) - MIN. 2 mils MAX. 4 mils (for anti-corrosive primer)
(d) SPECIAL INSTRUCTIONS - None
(e) PRIMER REQUIREMENTS (IF APPLICABLE): Amercoat 235, 240, or 385
(f) MAXIMUM ALLOWABLE CONDUCTIVITY (BRESLE PATCH METHOD): 30 mg/m ²
(g) MAXIMUM DEGREE OF FLASH RUSTING ALLOWABLE (LIST COMMERCIAL STANDARD): SSPC-SP 12/WJ-2L

SPECIAL SAFETY PRECAUTIONS: See MSDS

V. MIXING PROCEDURES:

(a) MIXING RATIOS BY WEIGHT – N/A BY VOLUME – N/A

(b) INDUCTION TIME - N/A

(c) RECOMMENDED SOLVENT – THINNING – NO THINNING ALLOWED CONFINED AREAS - NO THINNING ALLOWED NON-CONFINED AREAS - NO THINNING ALLOWED CLEAN UP – T-10

(d) THINNING REQUIREMENTS (RATIO) - NO THINNING ALLOWED

(e) POT LIFE - <u>NA</u> Hr(s) @ <u>°</u>C

(f) SPECIAL INSTRUCTIONS - Power mix to ensure pigment is uniformly suspended. Ensure good off-bottom mixing.

VI. APPLICATION:

(a) ENVIRONMENTAL LIMITATIONS -

SUBSTRATE TEMPERATURE: MIN. 20°F MAX. 120°F

MINIMUM SUBSTRATE TEMPERATURE DIFFERENCE ABOVE THE DEW POINT - $5^{\circ}F$

RELATIVE HUMIDITY: Refer to NAVSEA Standard Item 009-32

AMBIENT TEMPERATURE: MIN. 20°F MAX. 120°F

(b) FILM THICKNESS (SSPC-PA 2):

PER COAT:

WET MIN. <u>8 mils</u> WET MAX. <u>12 mils</u>

DRY MIN. <u>4 mils</u> DRY MAX. <u>6 mils</u>

TOTAL SYSTEM:

DRY MIN. DRY MAX. Refer to NAVSEA Standard Item 009.32

(c) DRY TIMES (ASTM D 1640)

		Alter I			
	90°F (32°C)	70°F (21°C)	50°F (10°C)	32°F (0°C)	20°F (-7°C)
Dry to Recoat (min)*	3 hours	5 hours	10 hours	20 hours	48 hours
Maximum recoat *			Unlimited		
Dry to Handle	4 hours	6 hours	12 hours	24 hours	72 hours
Full Service **	4 hours	6 hours	12 hours	24 hours	72 hours

(d) EQUIPMENT REQUIREMENTS (INCLUDE PREFERRED, SUITABLE, NOT SUITABLE REQUIREMENTS) – Standard airless spray with a minimum of a 45:1 (minimum) pump ratio with 0.021-0.025" spray tip, or- natural bristle brush, or phenolic core roller.

IF PLURAL COMPONENT EQUIPMENT IS REQUIRED, STATE SO - N/A

IF HEATED LINES ARE REQUIRED, STATE SO - N/A

(e) SPECIAL INSTRUCTIONS - Must be applied to primer that is tack-free but soft to finger pressure.

REPAIR PROCEDURES IF THE OVERCOAT WINDOW HAS BEEN EXCEEDED: Refer to NAVSEA Standard Item 009-32.