NAVSEA REVIEWED ASTM F-718

EuroNavy/Sherwin-Williams

EuroBasic ES301K Epoxy

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 EuroNavy ES301K

I. GENERIC TYPE & DESCRIPTION: EuroNavy EuroBasic ES301K Epoxy Coating

SPECIFICATION NO. (IF APPLICABLE): MIL-PRF-23236C

II. MANUFACTURING DATA:

(a) MANUFACTURER:	EuroNavy/Sherwin-Williams	(b) PRODUCT DESIGNATION:	EuroBasic ES301K
(c) COLOR(S)	Various Fed 595B	(d) USES:	Offshore & marine structures
(e) TECHNICAL SERVICE REPRESENTATIVE: Customer Service Hotline 1-877-877-7115		(f) NOT RECOMMENDED FOR: Potable water tanks	

III. PROPERTIES:

(a) % VOLUME SOLIDS: (ASTM D2697)	98 +- 2%	(b) FLASH POINT (SETA FLASH):	>212°F
(c) WEIGHT/GALLON: (ASTM D1475)	10.5-11.0 lbs/gallon mixed	(d) SHELF LIFE:	12 months
(e) VISCOSITY (ASTM D562):	112 KU's minimum mixed	(f) PACKAGING:	Quart, 1 and 5 gallon containers
(g) NUMBER OF COMPONENTS:	2	(h) GLOSS (ASTM D523):	Semi to high gloss
(i) STORAGE REQUIREMENTS:	Maintain material in protected storage between 40°F and 100°F.		
(j) REGULATORY DATA:	VOC is 150 g/L maximum		

(k) WEIGHT OF DRY FILM (WEIGHT PER SQUARE FOOT AT A GIVEN THICKNESS): N/A

SPECIAL SAFETY PRECAUTIONS

REFER TO MATERIAL SAFETY DATA SHEET (MSDS)

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS:

Refer to NAVSEA Standard Item 009-32

V. MIXING PROCEDURE:

(a) MIXING RATIO	BY WEIGHT:	6.5 parts resin to 1 part cure	
	BY VOLUME:	4.0 parts resin to 1part cure	
(b) INDUCTION TIME:		<60°F:	30 minutes maximum
		61-70°F:	None
		70-90°F:	None
		90°F+:	None
(c) RECOMMENDED SOLVENT(S):		THINNING:	N/A
		CLEAN UP:	EuroNavy TH03 or Sherwin-Williams R7K104
(d) THINNING REQUIREMENTS (%):		N/A	
(e) POT LIFE:	8 hours at 59°F to 68°F 3 hours at 77°F, 90 minutes at 86°F, 30 minutes at 104°F		
(f) SPECIAL INSTRUCTIONS:	Stir base for no longer than 4 minutes to obtain a smooth homogeneous condition. Add the curing agent slowly to the base under continuous agitation stirring for 3 minutes. Jiffy power mixer is recommended. Do not raise mixing blade out of material while stirring as this may entrap air. Do not over agitate as this will accelerate cure and reduce pot life. (For cartridge use, see next page.)		

VI. APPLICATION:

(a) ENVIRONMENTAL LIMITATIONS:

TEMPERATURE:	MIN:	59°F	MAX:	104°F
% RELATIVE HUMIDITY:	Refer to NAVSEA Standard Item 009-32			

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

(c) DRY TIMES –TOUCH:

40°F @ 50% R.H.	MIN:	Not recommended	MAX:	Not recommended
59°F @ 50% R.H.	MIN:	24 hours	MAX:	N/A
77°F @ 50% R.H.	MIN:	16 hours	MAX:	N/A
104°F @ 50% R.H.	MIN:	10 hours	MAX:	N/A

(c) DRY TIMES – RECOAT:

40°F @ 50% R.H.	MIN:	Not recommended	MAX:	Not recommended
59°F @ 50% R.H.	MIN:	24 hours	MAX:	10 days
77°F @ 50% R.H.	MIN:	16 hours	MAX:	7 days
104°F @ 50% R.H.	MIN:	8 hours	MAX:	4 days

(c) DRY TIMES – IMMERSION:

40°F @ 50% R.H.	MIN:	Not recommended
59°F @ 50% R.H.	MIN:	10 days
77°F @ 50% R.H.	MIN:	7 days
104°F @ 50% R.H.	MIN:	4 days

(d) EQUIPMENT REQUIREMENTS: Airless, plural, china bristle brush, solvent resistant medium nap roller

(e) SPECIAL INSTRUCTIONS:
For optimal results ensure that equipment and fluid lines are clean and free of water and solvent. Longer hose length or cold temperatures may require an increase in pump ratio and increased hose diameter. (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.

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