

NAVSEA ASTM F718 Instructions

General Instructions:

1. Some of the guidance presented below may contradict the information provided in ASTM F718-07. These NAVSEA ASTM F718 instructions supersedes the guidance provided by ASTM F718-07 with regards to NAVSEA review.
2. All information provided in the ASTM F718 will be evaluated for conformance to the military specification to which the product has been qualified. Ensure all information is within the requirements.
3. NAVSEA Standard Item 009-32 (NSI 009-32) supersedes the requirements in ASTM F718 data sheets. The NAVSEA-reviewed ASTM F718 data sheets shall supersede other manufacturer's ASTM F718 data sheets for products, even if it is newer (more recent) than the NAVSEA-reviewed ASTM F718 data sheets.
4. References to NSI 009-32 within the ASTM F718 are only permitted in Section IV, requirements (f) and (g). NSI 009-32 may not be referenced in any other locations within the ASTM F718.
5. All test methods and standards shall be specific industry standards such as ASTMs, SSPC, NACE, etc. When referencing SSPC standards, ensure that the equivalent NACE standard is referenced and vice versa.
6. Remember that the information contained therein will be utilized by both technical and production personnel. Keep it simple and brief but accurate and complete.
7. Any fields that are not applicable to the product may be listed with "NA" or "Not Applicable." Document rationale for the use of "NA" in submission email.
8. Please contact Naval Surface Warfare Center – Philadelphia Division, Bridget Hicks, 215-897-6961, bridget.hicks@navy.mil with any questions.

FIELD:	INSTRUCTION:
SECTION I. GENERIC TYPE AND DESCRIPTION:	General description of product type (Examples: epoxy, polyurethane, nonskid, primer, etc.)
SPECIFICATION NUMBER:	List all military specification numbers which the product is qualified to and that are applicable to this ASTM F718 (Examples: MIL-PRF-23236, MIL-DTL-24441, MIL-PRF-24613, etc.)
NOTE:	List all qualified product databases (QPD) the product is listed in. Many of the QPD numbers will match the military specification numbers. (Examples: QPD-23236, QPD-24613, QPD-24667, etc.)
DATE:	Enter the date of the latest revision in the right hand corner of the section.
SECTION II. MANUFACTURER DATA:	
(a) MANUFACTURER:	List manufacturer's complete name.
(b) PRODUCT DESIGNATION:	List manufacturer's product designation to be utilized when ordering/communicating with the manufacturer representative.
(c) COLOR(S):	List all manufactured colors of the product. If product is required to meet a SAE-AMS-STD-595 color, please document the color number.

(d) Uses:	List all uses and locations approved for use on Navy ships in accordance with NAVSEA Standard Item 009-32.
(e) TECHNICAL SERVICE REPRESENTATIVE:	List technical service representative and their contact information, to include: Name, Phone Number and Email Address. If representative varies between locations, please note in field.
SECTION III. PROPERTIES:	
(a) PERCENT VOLUME SOLIDS:	List the percent volume solids. The data provided shall be a percent of the total volume between 1 and 100%.
(b) PERCENT WEIGHT SOLIDS:	List the percent weight solids. The data provided shall be a percent of the total weight between 1 and 100%.
(c) FLASH POINT:	List the flash points for all components, excluding solid components, and the test method by which it was evaluated (Example test methods: ASTM D93, ASTM D56, ASTM D3278, etc.). List the test method within the parenthesis directly next to subsection header. List values in units of both Fahrenheit and Celsius. In order to list multiple components, click on the area to enter text and then a plus sign will appear near the bottom right corner of the field. Click the plus sign to add extra lines to the form in order to list the flash point for all components.
(d) WEIGHT PER VOLUME:	List the weight per volume for all components. In order to list multiple components, click on the area to enter text and then a plus sign will appear near the bottom right corner of the field. Click the plus sign to add extra lines to the form in order to list weight per volume for all components.
(e) PERCENT EDGE RETENTION:	If required by applicable specification provide applicable test method and percentage. If it is not applicable, designate with "NA".
(f) SHELF LIFE:	List the maximum permitted shelf life from the date of manufacture.
(g) VISCOSITY:	List the viscosity of each component, the viscosity of the two components mixed together and the test method by which it was evaluated (Example test methods: ASTM D562, ASTM D2196, etc.). List the test method within the parenthesis directly next to subsection header. Materials that are not typically rolled, brushed or sprayed may use "NA" for this field and specify application method in Section VI, field (d). In order to list multiple components, click on the area to enter text and then a plus sign will appear near the bottom right corner of the field. Click the plus sign to add extra lines to the form in order to list the viscosity for all components.
(h) PACKAGING:	List the volume of the complete kit mixed (not the largest can volume) and the individual volumes of each component.
(i) NUMBER OF COMPONENTS:	List the total number of components in the kit.
(j) GLOSS:	List the gloss of the dried coating film.
(k) STORAGE REQUIREMENTS:	List the minimum and maximum required storage temperatures in both Fahrenheit and Celsius. If applicable, provide additional paint storage requirements.
(l) VOLATILE ORGANIC COMPOUNDS:	List the total volatile organic compounds. List values in both units, "lb/gal" and "g/L".

(m) WEIGHT PER AREA OF DRY FILM AT 1 MIL THICKNESS:	List the weight per area of dry film at 1 mil thickness, this may be theoretically calculated for decking materials not designed to be applied at a 1 mil thickness. List values in both units, "lb/sq. ft." and "g/m ² ".
SECTION IV. SURFACE PREPARATION MINIMUM REQUIREMENTS:	
(a) INITIAL:	List the required surface preparation of the substrate prior to initial application of the product in accordance with the SSPC and NACE Surface Preparation Standards.
(b) TOUCH-UP:	List the required surface preparation of the substrate prior to repair touch-up application of the product in accordance with the SSPC and NACE surface preparation standards.
(c) PROFILE:	List the minimum and maximum surface profile of the substrate for product application and the test method by which it is evaluated (Example test method: ASTM D4417). List the test method within the parenthesis directly next to subsection header.
(d) SPECIAL INSTRUCTIONS:	List any additional instructions for surface preparation prior to product application. If no additional instructions, use "NA."
(e) PRIMER REQUIREMENTS:	List any additional requirements for the primer prior to product application, if required. If no additional requirements, use "NA."
(f) MAXIMUM ALLOWABLE CONDUCTIVITY:	List the maximum allowable conductivity in microsiemens/cm on surface prior to product application and the test method by which it is evaluated (Example test method: ASTM ISO 8502-9). List the test method within the parenthesis directly next to subsection header.
(g) MAXIMUM DEGREE OF FLASH RUST ALLOWED:	List the maximum allowed degree of surface flash rust prior to product application in accordance with the SSPC and NACE surface preparation water jet standard, if applicable.
SPECIAL SAFETY PRECAUTIONS	List any special safety precautions, if applicable.
SECTION V. MIXING PROCEDURES:	
(a) MIXING RATIOS:	List the mixing ratios by weight and volume (Example format: 1:2 or 1 to 2 (base to hardener)). If the mixing ratio is only defined by either weight or volume, on the ASTM F718 form, designate the method not used with "NA".
(b) INDUCTION TIME:	List the required induction time following mixing of components, if applicable.
(c) RECOMMENDED CLEANING SOLVENT:	List a recommended solvent for cleaning. No thinning of any products is permitted.
(d) POT LIFE:	List the pot life at the maximum, minimum and ambient (72 ± 6°F) temperature that are permitted for mixing prior to application. In order to list pot life times at multiple temperatures, click on the area to enter text and then a plus sign will appear near the bottom right corner of the field. Click the plus sign to add extra lines to the form in order to list the pot life for all components. If graphs are included in the applicable section, include the page number that the graphs are located on.
(e) SPECIAL INSTRUCTIONS:	List any additional instructions required for mixing the product. If no additional instructions, use "NA."

SECTION VI. APPLICATION:	
(a) ENVIRONMENTAL LIMITATIONS	List the maximum and minimum permitted substrate and ambient temperatures. List the minimum substrate temperature difference above the dew point and the maximum permitted relative humidity. When a temperature is recorded indicate this value in Fahrenheit and Celsius in the appropriate locations.
(b) FILM THICKNESS:	List the required wet and dry film thicknesses per coat of the product. List the total dry film thickness of the complete product system including all required coats.
(c) DRY TIMES:	At a minimum, list three temperatures that include the maximum, minimum and ambient ($72 \pm 6^{\circ}\text{F}$) for the specified dry time. List these dry times for dry to minimum and maximum overcoat, dry to handle (Examples: time until personnel can walk on, inspect, etc.) and cure to full service (Examples: vehicle traffic and flight operations). Graphs for each individual set of dry times may also be included as attachments. Do not combine all dry times into one graph. List the pages that the graphs are located on.
(d) EQUIPMENT REQUIREMENTS:	List all equipment requirements for the product application. Include preferred, suitable and not suitable equipment requirements. If plural component equipment and heated lines are required state so explicitly. If no additional requirements, use "NA."
(e) SPECIAL INSTRUCTIONS	If the overcoat window has been exceeded for critical and non-critical applications, list the instructions for way forward including surface preparation/cleanliness, etc.
GRAPHS FOR POT LIFE AND CURE TIMES:	Include graphs for pot life of the material versus temperature and the cure times versus temperature. Graphs should include specific titles, labeled axes and consistent units. The graphs should all be a consistent size. Prior to adding the graphs to the F718, save each graph as a separate image file (jpeg, png, etc.). On the ASTM F718 form, click the picture object to open a dialog box which will allow you to select the graph image file. In order to include more graphs than the space allotted, click on the area to enter graphs and then a plus sign will appear near the bottom right corner of the field. Click the plus sign to add additional space to the form for graphs.
ADDITIONAL DATA/INSTRUCTIONS	Include any useful, Navy specific information regarding Generic type and Description, Manufacturers Data, Properties, Surface Preparation Minimum Requirements, Mixing Procedures, and Application if applicable. Otherwise leave this section blank.