



# Standard Specification for Shipbuilders and Marine Paints and Coatings Product/ Procedure Data Sheet<sup>1</sup>

This standard is issued under the fixed designation F718; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

*This standard has been approved for use by agencies of the U.S. Department of Defense.*

## 1. Scope

1.1 The Shipbuilders and Marine Paints and Coatings Product/Procedure Data Sheet<sup>2</sup> provides on one sheet needed information concerning the characteristics of a specific paint or coating to include generic description, physical properties, surface preparation requirements, application requirements, and safety. The front side of the sheet contains four major, numbered paragraphs and a highlighted section for *Special Safety Precautions*. These paragraphs are as follows:

- I. Generic Type and Description
- II. Manufacturers Data
- III. Properties
- IV. Surface Preparation Minimum Requirements

The back side of the page contains the following paragraphs:

- V. Mixing Procedure
- VI. Application

1.2 The completed data sheets can be used by technical personnel to help evaluate the technical acceptability of a proposed material, by production personnel to evaluate production compatibility of proposed materials and to provide application instructions for selected paints and coatings materials, and by quality control personnel to verify attributes of materials.

1.3 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

<sup>1</sup> This standard is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.01 on Structures.

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<sup>2</sup> Available from ASTM International Headquarters. Order Adjunct No. ADJF0718. Original adjunct produced in 1993.

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>3</sup>

- D56 Test Method for Flash Point by Tag Closed Cup Tester
- D93 Test Methods for Flash Point by Pensky-Martens Closed Cup Tester
- D523 Test Method for Specular Gloss
- D1475 Test Method for Density of Liquid Coatings, Inks, and Related Products
- D1640 Test Methods for Drying, Curing, or Film Formation of Organic Coatings
- D2697 Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings
- D3278 Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus

### 2.2 ASTM Adjunct:

- Shipbuilder's and Marine Paints and Coatings Product/ Procedure Data Sheets<sup>2</sup>

### 2.3 U.S. EPA Method:<sup>4</sup>

- 24 U.S. Environmental Protection Agency, 40 CFR Ch. 1, Part 60, Appendix A, Determination of Volatile Matter Content, Density, Volume Solids, and Weight Solids of Surface Coatings

## 3. Instructions for Completing Data Sheet

3.1 When filling out the Product/Procedure Data Sheet (see Figs. 1 and 2) remember that the information contained therein will be utilized by both technical and production personnel. Keep it simple and brief but complete. The following instructions are organized by paragraph numbers contained within the data sheet.

<sup>3</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>4</sup> Available from U.S. Government Printing Office, Superintendent of Documents, 732 N. Capitol St., NW, Washington, DC 20401-0001, <http://www.access.gpo.gov>.



**V. MIXING PROCEDURES:**

- (a) MIXING RATIOS BY WEIGHT -  
BY VOLUME -
- (b) INDUCTION TIME -
- (c) RECOMMENDED SOLVENT - THINNING -  
CONFINED AREAS -  
NON-CONFINED AREAS -  
CLEAN UP -
- (d) THINNING REQUIREMENTS (RATIO) -  
IF PRODUCT IS NOT TO BE THINNED STATE "NO THINNING ALLOWED"
- (e) POT LIFE - \_\_\_\_\_ Hr (s) @ \_\_\_\_\_ °C  
 \_\_\_\_\_ Hr (s) @ \_\_\_\_\_ °C  
 \_\_\_\_\_ Hr (s) @ \_\_\_\_\_ °C
- (f) SPECIAL INSTRUCTIONS-

**VI. APPLICATION:**

- (a) ENVIRONMENTAL LIMITATIONS -  
 SUBSTRATE TEMPERATURE MIN. \_\_\_\_\_ MAX. \_\_\_\_\_  
 MINIMUM SUBSTRATE TEMPERATURE DIFFERENCE ABOVE THE DEW POINT- \_\_\_\_\_  
 MAXIMUM PERCENT RELATIVE HUMIDITY: \_\_\_\_\_
- (b) FILM THICKNESS (SSPC PA2-73T) – PER COAT:  
 WET MIN. \_\_\_\_\_ WET MAX. \_\_\_\_\_  
 DRY MIN. \_\_\_\_\_ DRY MAX. \_\_\_\_\_  
 TOTAL SYSTEM:  
 DRY MIN. \_\_\_\_\_ DRY MAX. \_\_\_\_\_
- (c) DRY TIMES (ASTM D1640) –  
 PROVIDE EITHER A GRAPH OR A CHART PER PARAGRAPH 3.8.1 SHOWING THE FOLLOWING CURE TIMES AT A MINIMUM:  
 1) DRY TO RECOAT  
 2) DRY TO HANDLE (I.E., TIME UNTIL PERSONNEL CAN WALK ON, INSPECT, TOUCH-UP COAT)  
 3) MAXIMUM RECOAT  
 4) CURE TO FULL SERVICE  
 THE GRAPH OR CHART SHALL HAVE AT A MINIMUM EACH OF THESE TIMES AT THE STATED MINIMUM AND MAXIMUM AMBIENT TEMPERATURES, AND AT LEAST ONE DATA POINT IN BETWEEN (E.G., IF A PRODUCT CAN BE APPLIED AS LOW AS 40°F, AND AS HIGH AS 100°F, THE CHART OR GRAPH MAY HAVE DRY TO RECOAT, DRY TO HANDLE, MAX RECOAT AND CURE TO FULL SERVICE TIMES FOR 40°F, 100°F, AND 70°F. FOR PRODUCTS WHERE HUMIDITY AFFECTS CURE TIMES, ADDITIONAL CHARTS AND/OR GRAPHS WILL BE REQUIRED FOR DIFFERENT AMBIENT RELATIVE HUMIDITY CONDITIONS.
- (d) EQUIPMENT REQUIREMENTS (INCLUDE PREFERRED, SUITABLE, NOT SUITABLE REQUIREMENTS) -  
 IF PLURAL COMPONENT EQUIPMENT IS REQUIRED STATE SO -  
 IF HEATED LINES ARE REQUIRED STATE SO -
- (e) SPECIAL INSTRUCTIONS -  
 PROVIDE INFORMATION FOR REPAIR PROCEDURES IF THE OVERCOAT WINDOW HAS BEEN EXCEEDED.

**FIG. 2 Data Sheet (Back)**