

VV-W-95C
16 July 1990

SUPERSEDING
VV-W-95B
January 10, 1984

FEDERAL SPECIFICATION

WAX, PARAFFIN, TECHNICAL

This specification is approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This document covers one type and four grades of paraffin wax (see 6.1).

1.2 Classification. The wax will be of the following grades, as specified in 1.2.1.

1.2.1 Part numbers. A part identification number (PIN) has been established. The PIN is made up of the document identifier and the PIN code numbers (see 6.2 and 6.7).

	M95	X
	*	*
Document identifier-----*		*
Code number-----*		*

Codes

Grade AA - 145o - 150 degrees Fahrenheit (oF) melting point (mp)....	Code X
Grade A - 135o - 140oF mp.....	Code A
Grade B - 130o - 134oF mp.....	Code B
Grade C - 123o - 127oF mp.....	Code C

Beneficial comments (recommendations, additions, deletions) and any pertinent
 *data which may be of use in improving this document should be addressed to: *
 *Commanding Officer (Code 156), Naval Construction Battalion Center, Port *
 *Hueneme, CA 93043-5000, by using the self-addressed Standardization *
 *Document Improvement Proposal (DD Form 1426) appearing at the end of this *
 *document or by letter. *

FSC 9160

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

VV-W-95C

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Standards. The following standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

Federal Standard

FED-STD-313 - Material Safety Data Sheets Preparation and the Submission of

Military Standards

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes

MIL-STD-147 - Palletized Unit Loads

MIL-STD-290 - Packaging of Petroleum and Related Products

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Bldg. 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents which are current on the date of the solicitation (see 6.2).

ASTM

ASTM D 87 - Melting Point of Petroleum Wax (Cooling Curve)

ASTM D 156 - Saybolt Color of Petroleum Products (Saybolt Chromometer Method)

ASTM D 721 - Oil Content of Petroleum Waxes

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for associated detail specifications, specification sheets or MS standards), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

VV-W-95C

3. REQUIREMENTS

3.1 Material. The wax shall be the type known commercially as a fully refined paraffin wax.

3.2 Chemical and physical requirements. The wax shall conform to the requirements specified in table I (see 4.5).

TABLE I. Requirements.

	Grade				Method
	AA	A	B	C	
Melting Point (cooling curve) oF					ASTM D 87; report to nearest oF
Minimum	145	135	130	123	
Maximum	150	140	134	127	
Color, Saybolt					ASTM D 156
Minimum	+25	+25	+25	+25	
Oil content, percent					ASTM D 721
Maximum	0.5	0.5	0.5	0.5	

3.3 Units of issue. Wax shall be furnished in single 1-pound (lb) or four 1/4-lb cakes, and 11-lb cakes or slabs, minimum masses (see 4.4.1 and 6.2).

3.4 Material safety data sheets (MSDS). MSDS shall be prepared in accordance with FED-STD-313 and submitted as directed in the contract or order at the time of acquisition award. Copies shall be forwarded to the designated Industrial Hygienist and the focal point of the activity that purchased the item and the focal point of the using activity if different (see 6.2, 6.3, and 6.4).

3.5 Workmanship. The finished wax shall be clean, homogeneous in appearance, and free from dirt and other foreign matter (see 4.4.2).

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this document where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this document shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in this document shall not relieve the

VV-W-95C

contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.1.2 Material inspection. The contractor is responsible for ensuring that supplies and materials are inspected for compliance with all the requirements specified herein and in applicable referenced documents.

4.2 Lot. The lot shall be wax of the same grade, manufactured from the same ingredients as a single batch or run, and offered for delivery at the same time.

4.2.1 Lot for examination. Lot size for examination shall be expressed in units of cakes or slabs.

4.2.2 Lot for test. Lot size for test shall be expressed in pounds.

4.2.3 Lot for preparation for delivery. Lot size for inspection of preparation for delivery shall be expressed in number of units prepared for shipment.

4.3 Sampling. Sampling shall be in accordance with MIL-STD-105, except as specified herein.

4.3.1 Sampling for test. The unit for testing shall be a 2-lb composite sample obtained by combining equal portions from samples selected at random throughout the lot. The sample size shall be as indicated in table II. The portions selected for the composite sample shall be heated to a temperature sufficient to melt the wax, and the mixture subjected to continuous stirring while being cooled to ambient temperature. The composite sample shall then be placed in a clean, dry, sealed container. Care shall be exercised to prevent contamination or alteration of the sample during the sampling, compositing, storage, and testing procedures. All test reports shall contain the individual values utilized in expressing the final result. The lot shall be unacceptable if the composite sample fails to meet any test requirement specified.

TABLE II. Sampling for compositing.

Lot size pound	Sample size
800 or less	2
801 through 22,000	3
22,001 or more	5

VV-W-95C

4.4 Examination. Noncompliance with any specified requirements shall constitute a defect.

4.4.1 Examination for net mass. Each sample unit shall be examined for conformance to 3.3. Masses shall be reported to the nearest 0.1 percent.

4.4.2 Examination for visual defects. Each sample unit shall be examined for conformance to 3.5.

4.5 Tests. Test the requirements as specified in table I. Single determinations for melting point and color shall be made on the composite sample. Duplicate determination for oil content shall be reported, and averaged to express the final result for the composite sample.

4.6 Preparation for delivery inspection. The preservation, packaging, packing, and marking of the item shall be inspected to verify conformance to the requirements of section 5.

5. PACKAGING

5.1 Packing and marking. Packing and marking shall be in accordance with the requirements of MIL-STD-290, with the level of packing as specified (see 6.2).

5.2 Palletization. Material shall be palletized in accordance with MIL-STD-147 when the following criteria are met:

- a. Load to consist of four or more unskidded containers; and,
- b. Load shall utilize a minimum of 80 percent of the pallet base.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The waxes covered by this document are intended for use in a variety of paraffin wax applications such as: manufacture of religious candles, waterproofing, impregnating, and coating of various materials, and as an embedding compound.

6.2 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in acquisition documents:

- a. Title, number, and date of this specification.
- b. Grade or PIN required (see 1.2.1).
- c. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).
- d. Size of cake or slab required (see 3.3).
- e. Addresses for submission of MSDS (see 3.4 and 6.4).

VV-W-95C

- f. Level of packing required (see 5.1).
- g. Special markings - each shipping container shall be marked:
"Store in a cool, dry place."

6.3 Data requirements. When this document is used in an acquisition and data are required to be delivered, the data requirements shall be developed as specified by an approved Data Item Description (DD Form 1664) and delivered in accordance with the approved Contract Data Requirements List (CDRL), incorporated into the contract. When the provisions of DoD Federal Acquisition Regulations (FAR) Supplement, Part 27, Sub-Part 27.475-1 (DD Form 1423) are invoked and the DD Form 1423 is not used, the data should be delivered by the contractor in accordance with the contract or purchase order requirements.

6.4 MSDS submission and forwarding. After review and acceptance of MSDS by designated recipients, approved copies will be forwarded to arrive at destinations prior to material delivery (see 3.4).

6.5 Sampling procedures

6.5.1 Sampling for examination. Examination for net mass is based on recommended inspection level S-2, and for visual defects, inspection level S-3. The Acceptable Quality Level (AQL) shall be 2.5 percent defective.

6.5.2 Sampling for inspection of preparation for delivery. Inspection of preparation for delivery is based in recommended level S-2 and AQL of 4.0 percent defective.

6.6 Cross reference data. Grades specified are former type 1 material.

6.6 Part or identifying number (PIN). PINs were developed to identify items covered by this document for cataloging purposes. The PIN consists of this document identifier (M95) and the SPN code number (see 1.2.1). The PIN shall be designated as follows:

PIN designation	M95	X
	*	*
Document number-----	*	*
Grade-----		*

The above identifies a Grade AA 145o - 150o melting point wax.

MILITARY INTERESTS:

CIVIL AGENCY COORDINATING ACTIVITIES:

Custodians

GPO
GSA - FSS

Army - EA
Navy - YD

PREPARING ACTIVITY:

Review Activities

Navy - YD

Army - MD, MI
Navy - SA
DLA - GS

(Project 9160-1007)

User Activities

Army - GL, MI
Navy - AS, MC

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See section 2 of this specification to obtain extra copies and other documents referenced herein.